

NOTES ON SOME MISCELLANEOUS COLEOPTERA, WITH
DESCRIPTIONS ON NEW SPECIES.

PART VII.

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(Contribution from the South Australian Museum.)

[Read August 8, 1929.]

STAPHYLINIDAE.

Diochus pubiventris, n. sp.

Black, prothorax, muzzle, antennae (some of the median joints infuscated), palpi, tips of elytra, and of abdominal segments, and the legs more or less reddish, or reddish-flavous. Sides with a few bristles, the abdomen with fine ashen pubescence.

Head rather long, with a few distinct punctures. Antennae rather long, seventh-tenth joints transverse. Prothorax slightly longer than wide, base evenly rounded and slightly wider than apex, sides gently rounded; with a few marginal punctures, and three forming a row on each side of middle. Elytra subquadrate, a narrow impression on each side of suture; with sparse and usually indistinct punctures. Abdomen long, parallel-sided to near apex; with dense, minute punctures. Length, 3.5-4.0 mm.

North Australia: Darwin (N. Davies, G. F. Hill, and British Museum); New South Wales: Tamworth (A. M. Lea). Type, I. 15889.

The suture is usually obscurely paler than the adjacent parts, but only the extreme tips of the elytra are noticeably pale; on *D. divisus* fully half or more of the elytra is pale. The pronotum is usually of a dingy castaneous-red, but sometimes the front parts are obscurely infuscated. From most directions the elytra appear polished and impunctate, but from others a few feeble rugose punctures may be seen.

Diochus longus, n. sp.

Black, shining, apical two-fifths of elytra, tips of abdominal segments, muzzle, palpi and legs more or less reddish-flavous. Abdomen with fine, ashen pubescence, sides with a few bristles.

Head distinctly longer than wide, a few distinct punctures in middle, becoming rather numerous on sides. Antennae short, fourth-tenth joints transverse. Prothorax distinctly longer than wide, base and apex rounded, sides parallel; with a few distinct submarginal punctures, and three forming a row on each side of middle. Elytra slightly longer than wide, surface faintly rugose but with some small punctures towards sides; suture feebly elevated. Abdomen with dense and minute punctures. Length, 4 mm.

Western Australia: Bunbury (A. M. Lea); unique.

The antennae are decidedly shorter than on *D. divisus* and *octavii*, most of the joints being transverse; they are infuscated throughout, although the apical joint is slightly paler than the preceding ones.

Neobisnius mediopolitus, n. sp.

♀. Black, basal joints of antennae, palpi and tarsi reddish, rest of legs, tip of abdomen, and suture and tips of elytra obscurely diluted with red. Elytra and abdomen with fairly dense, ashen pubescence, prothorax and head sparsely clothed.

Head subquadrate between clypeus and neck; with dense and sharply defined punctures, except on a median line that is dilated in front. Antennae rather short, fourth and fifth joints slightly, the sixth-tenth strongly transverse. Prothorax longer than wide, sides feebly decreasing in width posteriorly; punctures as on head, and also leaving a shining median line. Elytra distinctly longer than wide, sides parallel, suture finely carinated; punctures smaller and more crowded than on prothorax. Abdomen with five basal segments almost parallel-sided, with smaller and slightly denser punctures than on elytra; anal styles long. Length, 5 mm.

Victoria: Melbourne (F. Fischer). Type, I. 15890.

Near *N. procerulus*, but larger, elytra with smaller and denser punctures, and their tips not conspicuously pale; on *procerulus*, although only a small portion of the tips is pale, that portion is quite distinct; on the present species it is even smaller and needs looking for.

***Philonthus inconspicuus*, n. sp.**

Piceous-brown, legs, palpi and basal joints of antennae paler. A few setae scattered about, the abdomen with short, ashen pubescence.

Head quadrate between clypeus and neck; a shallow triangular impression in front; with a few punctures. Eyes rather small. Antennae rather short, fourth to tenth joints transverse. Apical joint of palpi thin and rather long. Prothorax longer than wide, with straight sides, feebly diminishing in width posteriorly; with sparse, distinct, submarginal punctures, and four forming a series on each side of middle. Elytra slightly longer than wide, sides almost parallel, a narrowly impressed line on each side of suture, and one on each side; with fairly dense, sharply defined punctures, almost as large as those on pronotum. Abdomen parallel-sided to near apex, punctures smaller and denser than on elytra, and smaller on back parts of segments. Length, 3.2-3.5 mm.

Queensland: Coen River (W. D. Dodd), Mulgrave River (H. Hacker). Type, I. 12705.

Decidedly smaller than any *Philonthus* previously recorded from Australia, but the species certainly appears to belong to the same genus as *P. nigritulus*, of which the specimens have the appearance as of pale ones on a greatly reduced scale. The apical joint of the palpi is thinner than usual, but scarcely bristle-like, as on *Heterothops*. The prothorax is slightly paler than the head, and the base and apex of the abdomen are paler than the middle, but the colours are dingy, although most of the upper surface is polished.

***Cafius gigas*, n. sp.**

♂. Black, in parts with a faint metallic gloss; antennae, palpi, legs and tips of abdominal segments, more or less reddish-brown. Elytra and abdomen with depressed, blackish pubescence or setae, the sides with a few bristles, becoming dense on tip of abdomen; some mouth parts with very dense, flavous pubescence.

Head large, slightly transverse between clypeus and neck; with large and small, irregularly distributed punctures, more crowded about hind angles than elsewhere. Antennae moderately long, first joint as long as second and third combined, and much longer than eyes, ninth and tenth feebly transverse. Apical joint of palpi very little longer than subapical. Prothorax about as long as the apical width, sides gently decreasing in width to base, which is gently rounded; with large and small, irregularly distributed punctures, but leaving an ill-defined median line. Elytra slightly wider than prothorax, and not much longer, outer apical angles obliquely cut off; punctures crowded and rugose, but not very large. Abdomen with sides evenly decreasing in width posteriorly; punctures more elongated and less crowded than on elytra; tip of under surface deeply notched. Tibiae with numerous spines and bristles; front tarsi dilated. Length, 19-20 mm.

♀. Differs in having the head considerably smaller, elytra narrower, abdomen not notched, and front tarsi less dilated.

Lord Howe Island: Mount Ledgbird. Types, in Australian Museum.

The hairy mouth parts, mandibles, palpi, sides of prothorax, legs and generic details generally are as in *Cafius*; but the species is considerably longer and wider than any other of that genus before me, and the types were not taken from sea-beaches, where those of the genus are usually to be found. The mandibles are stout, with a strong tooth about the middle, on the left one of the male (those of the female are concealed) there are some minute granules on the anterior edge of the tooth; the large punctures on the pronotum are fairly dense on the sides and near the median line. The types were known to Olliff, but were passed over by him.

HETEROTHOPS SEMICUPREA, Fvl.

Mr. Arrow kindly sent a cotype of this species for examination. In general appearance it is close to *H. kentiae*, but differs in being more robust, head distinctly longer and more oval, elytra with larger punctures, suture scarcely elevated, and the dark blotch slightly more distant from suture. It is closer to *H. bimaculata*, the outlines being practically identical, but the spot on each elytron is somewhat differently placed, and more of the abdomen is pale.

Heterothops myrmeciae, n. sp.

Black, shining, elytra blackish-brown, the tips obscurely pale, apical segment of abdomen, tips of most of the others, mouth parts, palpi, four basal joints of antennae, and the legs, brownish-flavous. Elytra and abdomen with short, depressed, pale pubescence, the sides with a few setae.

Head subovate, more convex than usual, with very few scattered punctures. Eyes small. Antennae rather long, first joint almost as long as second and third combined, sixth-seventh feebly, eighth-tenth moderately transverse. Apical joint of palpi setiform, almost as long as the subapical one. Prothorax transverse, base strongly rounded and much wider than apex; with a few marginal punctures, and two in middle, about one-fourth from apex. Elytra subquadrate, suture feebly elevated posteriorly; with dense and small punctures. Abdomen almost parallel-sided to near apex, punctures mostly less distinct than on elytra; anal styles long. Length, 3.5-4.0 mm.

Victoria: Northern Gippsland (H. W. Davey), Fern Tree Gully, in July (C. Oke). Type, I. 15894.

With the general appearance of *H. luctuosa*, but the eyes are much smaller, the abdomen is less iridescent, and more of it is pale; it is decidedly wider than *H. picipennis*, but the eyes are much the same; it is less robust than *H. obscuripennis*, and has much smaller eyes. On one specimen there is a small puncture immediately behind each of the two distinct ones on the pronotum. One of the specimens was taken by Mr. Oke from a nest of a black "jumper" ant (*Myrmecia pilosula*).

Quedius macrops, n. sp.

♂. Black, shining, antennae, palpi, legs and tips of several abdominal segments more or less reddish. Elytra with fairly dense, depressed, dark pubescence, somewhat longer and sparser on abdomen; sides with blackish bristles, becoming dense on abdomen.

Head moderately large; with a few conspicuous punctures near eyes and neck, a shallow depression near each antenna. Eyes very large, occupying most of the sides between clypeus and neck. Antennae rather thin, eighth-tenth joints each about as long as wide. Prothorax slightly transverse, base strongly rounded and wider than apex; with a few marginal punctures, and two submedian ones. Elytra distinctly wider than long, suture moderately elevated; punctures rather

dense and small. Abdomen regularly diminishing in width posteriorly, punctures about bases of segments larger than on elytra, becoming smaller and sparser posteriorly; tip of under surface with a small triangular notch. Front tarsi moderately inflated, middle pair combless. Length, 5.0-5.5 mm.

♀. Differs in having the head slightly smaller, antennae slightly shorter, front tarsi not inflated, and abdomen not notched at apex.

Queensland: Herberton (H. J. Carter); New South Wales: Sydney (R. Helms). Type, I. 15891.

About the size of *Q. tepperi* and *cuprinus*, but head of different shape, with much larger eyes, antennae paler, etc.; the eyes are larger than on *Q. hackeri*, the legs are somewhat darker, and the middle tarsi are combless; *Q. luridipennis* has somewhat smaller eyes and combed middle tarsi in the male. Both surfaces of the abdomen are brilliantly iridescent, as are also parts of the legs. The elytra are not as black as the other parts, and their extreme tips are obscurely diluted with red on five specimens; on a sixth the elytra are obscurely reddish, in parts deeply infuscated. In some lights the head and prothorax have a silken gloss.

Quedius calogaster, n. sp.

♂. Black, shining; antennae, palpi, most of legs, apical segment of abdomen and apex of subapical one, more or less red, elytra with a slight greenish gloss, the shoulders, sides, and tips obscurely diluted with red. Elytra with moderately dense, dark pubescence, becoming sparser and longer on abdomen; sides with sparse, long, blackish bristles, becoming rather dense on abdomen.

Head rather large, with a few strong punctures near eyes and neck. Eyes large. Antennae moderately long, sixth-tenth joints feebly transverse. Prothorax moderately transverse, base strongly and evenly rounded; with a few large marginal punctures, and two close together one-third from apex. Elytra slightly transverse, each separately rounded at apex; with dense and small punctures. Abdomen regularly diminishing in width posteriorly; punctures about as large as on elytra, at bases of segments, but sparser and smaller posteriorly; tip of under surface slightly notched; anal styles long. Front tarsi moderately inflated. Length, 6-7 mm.

♀. Differs in having the head smaller, antennae somewhat shorter, elytra smaller and entirely dark, abdomen not notched, and front tarsi not dilated.

Queensland: Ravenshoe and Magnetic Island (H. J. Carter). Type, I. 15892.

In general appearance close to *Q. iridiventris* and *inconspicuus*, but head of different shape, with larger eyes, and paler antennae. Both surfaces of the abdomen are brilliantly iridescent, the colours varying with the light from almost entirely purplish-blue to almost entirely coppery. From some directions the elytra appear to be minutely granulate. Under the microscope I could not see a comb on the middle tarsi of the male, but a leg was not detached from the type for special examination.

Quedius insignis, n. sp.

♂. Black, shining; elytra pale castaneous, four basal joints of antennae, parts of palpi, and the tarsi, more or less obscurely reddish. Abdomen sparsely setose and with fairly numerous bristles.

Head rather small, with minute, scattered punctures. Eyes not very large, about as long as the inter-antennary space. Antennae short and stout, first joint almost as long as second and third combined, third distinctly longer than second and the length of eleventh, fourth moderately, the fifth-tenth strongly transverse. Palpi short, subapical joint obtriangular and slightly longer than apical. Mandibles short and strong. Prothorax moderately transverse, base and sides evenly rounded; a very finely impressed line on all margins, on each side it bifurcates at about the apical third, so that a narrow triangle is enclosed at the apex; with a few distinct

punctures. Elytra subquadrate, sides gently rounded, apex truncated; with a narrowly impressed line on each side of suture, and one before each inflexed margin; with a few distinct punctures. Abdomen slightly inflated about middle, with distinct but irregularly distributed punctures; apex of under surface with a deep notch. Legs short, front tarsi moderately dilated. Length, 7 mm.

Victoria: Beaconsfield (F. E. Wilson). Type (unique), I. 15893.

With the general appearance of the European *Astrapaeus ulmi*, on a greatly reduced scale, but the type is certainly a male, and its palpi have the apical joint small and wedge-shaped, instead of large and securiform. For the present it may be referred to *Quedius*, although the punctures and antennae are very unlike those of all other described Australian species. The eighth-tenth joints of antennae are fully twice as wide as long. There are a few upright setae on the elytra near the suture, and a few submarginal ones, the elytra otherwise being glabrous. There is a distinct row of punctures on each side of the suture, and another about the middle of each elytron, about the tips there are a few punctures, and short impressed lines. There are a few distinct submarginal punctures on the pronotum, including two median ones almost at the apex, instead of some distance from it, as on other species of *Quedius*.

***Acylophorus tenuipes*, n. sp.**

♀. Blackish-brown, antennae (some of the median joints slightly infuscated), palpi, tarsi, and tips of two apical segments of abdomen paler. Elytra and abdomen with dark, depressed pubescence or setae, the sides with a few bristles.

Head rather convex, between clypeus and neck as long as wide, with numerous small punctures and six large ones. Mandibles thin and acute, each with a rounded projection towards base. Antennae rather long and thin, first joint curved, as long as three following combined, and about twice the length of eyes, second as long as third and fourth combined, the others gradually decreasing in length, ninth and tenth somewhat transverse. Prothorax slightly transverse, apex scarcely as wide as base, which is evenly rounded, sides finely rounded; with numerous minute punctures, and a few large ones. Elytra not much longer or wider than prothorax, with dense and somewhat rugose punctures, of moderate size or rather small. Abdomen almost parallel-sided to near apex, punctures slightly larger and more angular than on elytra. Tarsi thin. Length, 7.5-8.5 mm.

Queensland: Brisbane, in July (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

It is with some doubts that this species is referred to *Acylophorus*, as the head is much larger than on the other species known to me (*A. glaberrimus*, *ruficollis* and *asperatus*); but in the allied genera *Quedius* (e.g., *Q. analis* and *fulgidus*) and *Heterothops* (e.g., *H. tibialis* and *laticeps*) the heads differ greatly in size. I have considered the possibility of the species belonging to *Quediopsis* (the three specimens are strikingly like many species of *Quedius*, to which, if shorn of their antennae, they would almost certainly be referred), but Fauvel states that the antennae of that genus are not so strongly geniculate as in *Acylophorus*; he also states that in the male the three basal joints of the tarsi are "*maxime dilatatis, patellatis*," so that those of the female are at least likely to be of considerable width instead of thin; the maxillary palpi were described as having the three apical joints equal, in this species the subapical joint is shorter than the preceding or following ones; the antennae were noted as having all the joints longer than wide, in this species two are certainly transverse.

Only the type appears to be mature, two other specimens are pale castaneous, with most of the abdomen infuscated; all, however, have some of the median joints of the antennae infuscated; all have the anal styles withdrawn, but their outlines are visible through the derm. Of the large punctures on the head, two are rather

close together between the eyes, and four are subbasal in oblique pairs, on the pronotum two are submedian as on most species of *Quedius*, and there are two or three near the front angles.

***Atanygnathus bicolor*, n. sp.**

Black, shining, basal three-fifths of prothorax, apex of elytra, palpi, and legs flavous, or flavous-brown, antennae with basal and apical joints pale, the others more or less deeply infuscated. Elytra and abdomen with fine, depressed, pale pubescence; the sides, especially of abdomen, with dark bristles.

Head elongate, polished and impunctate. Antennae long and thin, no joint transverse. Prothorax transverse, sides moderately rounded, the base more strongly so, front angles rounded off, with a few small punctures scattered about, and a distinct one on each side of the middle. Elytra subquadrate, outer apical angles notched, with small, evenly crowded punctures. Abdomen evenly diminishing in width posteriorly, with punctures as on elytra, except that there are some larger ones at the tips of four segments; anal styles long. Length, 3-4 mm.

North Australia: Daly River (H. Wesselman). Oenpelli (National Museum from P. Cahill), Darwin (G. F. Hill), Adelaide River (British Museum), Melville Island (W. D. Dodd). Type, I. 12762.

The bicoloured prothorax and elytra are at once distinctive from *A. terminalis*. Usually only one basal joint of antennae is pale, but there are four or five (sometimes almost white) at the apex, the dark part of the pronotum is usually quite black, but occasionally is dark brown; the abdomen is slightly iridescent and the tips of the segments obscurely diluted with red.

CUCUJIDAE.

***Laemophlaeus distorticornis*, n. sp.**

♂. Dark brown and opaque, muzzle and elytra, except for markings, paler.

Head somewhat flattened, with a narrow, shining, median line; very minutely punctate. Antennae very long and thin, first joint distorted, the others cylindrical, third slightly longer than second or fourth, but shorter than fifth, fifth-tenth equal, the eleventh slightly longer. Prothorax with sides gently rounded and distinctly wider at apex than at base, a narrow carina near each side, but not quite parallel

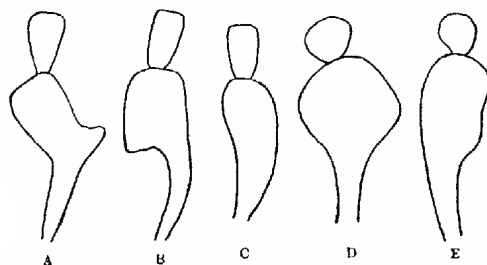


Fig. 1.

A, B, C, Two basal joints of antennae of *Laemophlaeus distorticornis* Lea; D, E, of *L. norfolcensis* Lea.

with it; punctures as on head. Elytra with a fairly well defined subsutural stria, and with three geminate pairs of striae on each elytron, the interstice between each pair feebly raised but posteriorly becoming subcarinated. Length, 1.5-2.0 mm.

♀. Differs in having the head smaller, antennae shorter, with the first joint not distorted, but evenly dilated to apex, and the prothorax less conspicuously dilated to apex.

Lord Howe Island (A. M. Lea). Type, I. 7591.

At first glance apparently close to *L. blackburni*, but elytral markings different, antennae very much longer and thinner, and first joint very different. The elytra are of a dingy flavous, with a conspicuous brown fascia in the middle, extending from the suture to the first pair of discal geminate striae, along these it is directed for a short distance towards the base, and posteriorly towards the apex, but half-way to the latter it is suddenly directed outwards but not to the margins, on some specimens the markings are somewhat like an M; on some the markings consist of disconnected spots; on others there is an infuscation of the suture posteriorly in addition to the M-like markings; each joint of the antennae is paler at the base than at the apex. The antennae are unusually long and thin, being quite as long as the body on the female, and conspicuously longer on the male; the first joint of the male varies considerably; on some specimens, including the type, it is evenly dilated from the base to the middle and is then suddenly thickened and deflected, but it varies in appearance (fig. 1, A and B) from almost every point of view; on other specimens (fig. 1, C) it is considerably smaller and curved, rather than distorted. Seventeen specimens were obtained.

***Laemophlaeus howensis*, n. sp.**

♂. Pale flavo-castaneous and moderately shining.

Head flat between eyes but gently semi-circularly concave in front, median line slightly impressed but distinct; punctures dense and small but rather sharply defined. Antennae extending to hind coxae, first joint long, stout, and strongly curved, second globular and slightly larger than third, fourth-tenth subequal, eleventh slightly longer. Prothorax about once and one-half as wide as long, apex scarcely wider than base, sides very feebly rounded, with a narrow carina towards each side but scarcely parallel with it; punctures as on head. Elytra with sub-sutural and geminate striae much as on preceding species. Length, 1.2-1.7 mm.

♀. Differs in having the head somewhat smaller, and antennae shorter, with the first joint smaller and scarcely curved.

Lord Howe Island (A. M. Lea). Type, I. 7592.

Allied to *L. diemenensis*, but smaller, less polished, basal joint of antennae of male very different and the following ones very similar to those of the female, the elytral striation is also much less defined; it is much the size and colours of *L. testaceus* but is much less polished and is otherwise very different. A specimen of each sex was taken.

Var. (?). A female from the island is structurally so close to the female of this species, that it appears desirable to leave it unnamed till a male can be obtained; it differs from the female in being smaller, and with the whole of the upper surface opaque.

***Laemophlaeus bimaculiflavus*, n. sp.**

Castaneous and shining, prothorax somewhat darker, elytra still darker, almost black, but with two large, sharply defined, flavous spots.

Head wide, with a feeble median line, a sharply impressed line near base and another near each eye (these large), with a shallow depression towards each side; punctures small and dense but sharply defined. Antennae not much longer than head and prothorax combined, first joint stout, not as long as second and third combined, second subglobular, third moderately long, fourth-eighth sub-elliptic and subequal, ninth and tenth slightly longer, increasing in width to apex, eleventh ovate. Prothorax almost twice as wide as long, sides rounded, base much narrower than apex, with the hind angles acute and slightly produced, a well impressed stria towards each side, rather suddenly deepened near base; punctures slightly sparser, but otherwise as on head. Elytra wide, sides gently rounded; sub-sutural stria on each distinct only posteriorly, inwards of each

shoulder with two conjoined striae, the inner one rather deep, oblique and terminated near apex, the other vanishing before the middle, a sharply impressed stria commencing on the margin at the base, and slightly diverging from the margin till it suddenly terminates near the apex; punctures much as on prothorax. Length, 5 mm.

Lord Howe Island (A. M. Lea). Type, I. 7594.

A well-marked species, larger than any other known from Australia. The flavous spot on each elytron is about the length of the prothorax, and half the width; it commences at about the basal fifth and is fairly close to the suture and outer margin.

***Laemophlaeus fuscolineatus*, n. sp.**

Castaneous, elytra with suture and three narrow lines on each infuscated. Very finely pubescent.

Head rather flat between eyes, with a feeble depression towards each side, median line slightly impressed; punctures small and dense. Antennae moderately long, first joint stout, second-eighth subglobular and rather small, ninth-eleventh somewhat longer and forming a loose club. Prothorax strongly transverse, sides slightly rounded and very little wider at apex than at base, with a narrow carina towards and almost parallel with each side; a shining and almost impunctate median line, but elsewhere punctures much as on head. Elytra with a subsutural and three geminate striae on each; punctures smaller and denser than on head. Length, 2 mm.

Lord Howe Island (A. M. Lea). Type, I. 7595.

A very distinct species. From some directions the pronotum appears to have two vaguely infuscated vittae; the elytral markings consist of seven sharply defined, infuscated lines, extending from the base to near the apex, they are all narrow, but the sutural marking is twice the width of each of the others; the striae themselves are much as on *L. distorticornis* and *howensis*.

***Laemophlaeus norfolcensis*, n. sp.**

♂. Pale castaneous and somewhat shining.

Head large, somewhat concave in front, median line well defined; with small, dense punctures, and very finely shagreened. Antennae rather long, first joint long, suddenly and strongly dilated from about the middle, second and third subglobular and subequal, fourth-eighth subequal in length but gradually becoming thinner, ninth-eleventh longer and highly polished. Prothorax at apex almost twice the median length, sides feebly diminishing in width from apex to base, a fine carina towards and almost parallel with each side; with a shining and impunctate median line; punctures and shagreening as on head. Elytra rather wide, striae well defined and scarcely geminate in arrangement. Length, 2.5 mm.

Norfolk Island (A. M. Lea). Type (unique), I. 7593.

Allied to *L. diemenensis*, but prothorax much wider and antennae very different; as the basal joint of the antennae varies considerably in appearance with the point of view, two outlines of it (fig. 1, D and E) have been given. The head and prothorax have a somewhat silken appearance, the elytra are slightly darker and more polished, but with the middle somewhat diluted in colour. There is a fringe of very fine setae on the front margin of the prothorax.

LUCANIDAE.

***Ceratogathus minutus*, n. sp.**

♂. Blackish, mesosternum, metasternum and abdomen almost flavous, legs and antennae darker, basal joints of antennae paler than lamellae. Moderately clothed with short dark setae, mixed with white ones, more or less condensed to form feeble spots.

Head transverse; with crowded punctures, a small process on each side partly concealed by base of antennae. Mandibles rather short. Basal joint of antennae curved, about as long as the five following combined, of these the first is almost globular and the others are small; club composed of three elongate lamellae. Prothorax almost twice as wide as long, sides rounded and minutely serrate, apex

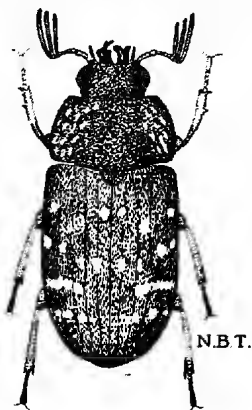


Fig. 2.

Ceratognathus minutus Lea.

shallowly emarginate, base bisinuate; punctures much as on head. Elytra parallel-sided to near apex; finely striated and with crowded punctures. Legs thin, claw joints elongate. Length, 4.5 mm.

New South Wales: National Park (N. B. Tindale). Type (unique), I. 16956.

The type is the smallest stag-beetle that I have seen from any part of the world; its length is less than that of the elytra of *C. niger*, and its mandibles are about the length of those of the female of that species, although by its antennae the type is evidently a male. The mandibles are distinctly shorter than the head, the left one has three cusps: an obtuse outer one, an acute one curved to the right, inwards of which is a smaller acute one; the right mandible has but two cusps, and from some directions appears as a short, broad Y. Each of the middle tibiae has a small medio-external tooth, becoming still smaller on the hind ones; parts of both front legs are missing.

LAMPRIMA ADOLPHINAE Gestro (*Neolamprima*).

Of three males under examination one specimen measures 49 mm., with mandibles 15 mm., and is a typical *Neolamprima*. It is mostly of a dark greenish-purple with the head brassy. A second specimen measures 36 mm., with the



Fig. 3.

Lamprima adolphinae Gestro, natural size.

mandibles 11 mm.; it is also a typical *Neolamprima*, although the mandibles are somewhat shorter and with less numerous teeth. It is of an uniform coppery colour, except that the prothorax is subopaque, in contrast with the shining head and elytra. The third specimen measures 25 mm., with the mandibles 6 mm., and appears quite a normal *Lamprima*. It is of a dull bronze colour, with the head polished and partly coppery-purple. All three have the pronotum rather coarsely shagreened, and the elytra more finely so and with vermiculate scratches. The first specimen was from an unknown locality in New Guinea, the others are from Komba (at an elevation of 5,000 feet), from the Rev. L. Wagner, who also sent two females; of these one is entirely coppery-golden on the upper surface, the second has the elytra deep blue, shading off to coppery-green at the suture, its pronotum is deep purple and head coppery. Both specimens are, in fact, very similar to Queensland females of *L. mandibularis*.

SCARABAEIDAE.

DIAPHONIA GULOSA Jans., var *angustiflava*, n. var.

Two males in the Australian Museum, from Mount Warning (on the northern border of New South Wales), taken in January by Mr. A. Musgrave, evidently represent a variety of *D. gulosa*. In structure they agree perfectly with normal Victorian males of the species. One specimen has the dark parts almost or quite black, with flavous markings consisting of two spots on the head in front of the eyes, the pronotum with a narrow medioapical fascia, a vitta on each side from apex almost to base, but with a median dark spot; the scutellum with a short, narrow, median spot, each elytron with a narrow vitta from the middle of its base to the apical fifth, where it curves round (like a small hook) to near the suture, a thinner marginal vitta from the base to the basal third, and a narrow apical fascia; on the under parts there is a small spot on each side of the mesosternum and metasternum, the side of each hind coxa and on each side of four basal segments of abdomen, four disconnected spots on the pygidium; the intercoxal process of the mesosternum; and there is also a spot on each hind femur. On the second specimen the pale spots on the head are extended and almost conjoined, the apical and lateral marks on the pronotum are joined together, and there are three small spots triangularly placed between the middle and the base, the scutellum is largely pale, the dark parts of the elytra are paler (dark purplish-brown), the long flavous vitta on each is almost the same, but the latero-basal one is wider, slightly longer, and there is an obscure spot between it and the transverse apical mark; the markings on the under surface and legs are more extended and the pale markings on the pygidium are connected together (approaching the typical form).

EUCNEMIDAE.

Microrhagus howensis, n. sp.

Deep black; legs reddish, the femora partly infuscated. Clothed with short black pubescence, becoming stramineous about base of prothorax and elytra.

Head with crowded punctures, and with a feeble median carina. Antennae rather short, second joint short, third not quite as long as fourth and fifth combined, eleventh distinctly longer than tenth. Prothorax moderately transverse, parallel-sided except for the rounded front angles, hind angles very acute and acutely carinated, front margin finely carinated, the carina on each side with a short spur directed obliquely backwards, with a short but distinct mediobasal carina; with dense and small, but sharply defined punctures. Elytra almost parallel-sided; with dense, subasperate punctures about base and on tips, elsewhere with smaller ones; with vague remnants of striation, but becoming distinct on the tips. Prosternal sulci narrow and deep in front, becoming shallower and wider

posteriorly; propleural parallelograms feebly concave posteriorly, fully thrice as long as wide. Length, 3.75 mm.

Lord Howe Island (A. M. Lea). Type (unique), I. 5725.

A deep black species with prosternal sulci distinctly less parallel-sided than usual in the genus. The antennae, at most, could be regarded as very feebly serrated.

***Fornax howensis*, n. sp.**

Castaneous-brown, antennae (basal joint excepted) and legs paler. Densely and uniformly clothed with stramineous pubescence.

Head evenly convex, with rather crowded but small punctures; antennary sockets close together and without a connecting carina. Antennae moderately long, second joint very short, third almost as long as three following combined, fourth slightly shorter than fifth, and fifth than sixth, sixth-tenth subequal, eleventh almost as long as ninth and tenth combined. Prothorax large, sides gently rounded and widest at about basal third; with rather small punctures, becoming crowded on sides. Elytra scarcely twice as long as head and prothorax combined, with striation well defined about suture, but rather feeble elsewhere; fairly dense subasperate punctures about base, smaller and sparser elsewhere. Hind coxae terminating almost as a point on each side, greatest length equal to that of two basal segments of abdomen combined; basal joint of hind tarsi about equal to the rest combined. Length, 4.5-6.0 mm.

Lord Howe Island (A. M. Lea). Type, I. 5730.

A comparatively robust species, with prothorax nowhere parallel-sided. One specimen was obtained from a tree-fern, another from a *Kentia*, and four from the summit of Mount Gower.

***Fornax norfolcensis*, n. sp.**

Dark castaneous-brown, antennae and legs paler. Densely and uniformly clothed with short, stramineous pubescence.

Head evenly convex, with small dense punctures; without a carina between antennary sockets. Antennae moderately long, second joint about half the length of third, third slightly longer than fourth and fifth combined, fourth and fifth subequal and slightly shorter than the following ones, eleventh almost as long as ninth and tenth combined. Prothorax moderately robust, sides gently rounded and widest near base, with a feeble median line; punctures small but rather dense and well defined, becoming crowded on sides. Elytra with crowded punctures about base, becoming sparser elsewhere; striation well defined about suture and at base and apex, but rather feeble elsewhere. Hind coxae strongly and evenly diminishing in width to sides, greatest length considerably more than that of second abdominal segment; basal joint of hind tarsi as long as the rest combined. Length, 4.5-6.0 mm.

Norfolk Island (A. M. Lea). Type, I. 5731.

Close to the preceding species, but consistently narrower, darker, and with somewhat shorter antennae. On the smaller specimens the striation has a tendency to disappear about the middle. Seven specimens were obtained, three of which were sieved from fallen leaves.

***Fornax talayroides*, n. sp.**

Bright castaneous, legs somewhat paler. Uniformly clothed with stramineous pubescence.

Head strongly convex; with somewhat crowded punctures; without a carina connecting the antennary sockets. Antennae rather long and thin, second joint very short, third almost the length of three following combined, fourth slightly

shorter than fifth, and fifth than sixth, sixth-tenth subequal, eleventh distinctly longer. Prothorax with sides feebly rounded in front, thence feebly oblique to base; punctures rather small and partly concealed on disc, becoming crowded on sides. Elytra feebly diminishing in width from shoulders; moderately densely granulate-punctate about base, punctures smaller, sparser and less asperate elsewhere; striation distinct about suture, feeble or wanting elsewhere. Hind coxae unusually long, their greatest length fully equal to that of fifth abdominal segment, but rapidly narrowing to a point only on each side; basal joint of hind tarsi slightly longer than the rest combined, claw joint shorter than usual. Length, 4.75 mm.

Lord Howe Island (A. M. Lea). Type, I. 5737.

An unusually narrow species, in general appearance strikingly close to *Talayra elongata* of the Melandryidae. Two specimens exactly alike were obtained; a larger (6 mm.) specimen appears to belong to the species, but is darker, with more depressed clothing and somewhat coarser punctures.

ELATERIDAE.

Glyphochilus basicollis, n. sp.

Piceous-brown and livid-flavous, appendages more or less flavous. Moderately densely clothed with stramineous pubescence, shorter on under than on upper surface.

Head gently convex, evenly rounded in front; with dense, subreticulate punctures. Antennae thin, extending almost to abdomen, third joint about twice the length of second, and half the length of fourth, the others gradually decreasing in length, but eleventh slightly longer than tenth. Prothorax with sides increasing in width towards and coarctate near apex, hind angles large and unicarinate; with unevenly distributed punctures. Elytra narrow, each rather narrowly rounded at apex; with narrowly impressed striae; rather densely granulate-punctate about base, the punctures becoming sparser and less rough posteriorly. Tarsi thin, lobe of fourth joint rather thin and curved. Length, 7.5-8.0 mm.

Norfolk Island (A. M. Lea). Type, I. 5673.

The prothorax is wider at the base than is usual in the genus; but the prosternal sutures opening out and deeper in front are indicative that the species should be referred to *Glyphochilus*, rather than to *Monocrepidius*. It is a curiously mottled species; the head is almost black, with the muzzle pale; the pronotum is mostly pale, but with two large blackish blotches, sometimes conjoined; the elytra vary from almost entirely pale to almost entirely infuscated; the under surface is mostly dark, but with the sides of the prosternum pale, the eight apical joints of antennae have more or less of their basal portions infuscated. The punctures on the prothorax are fairly dense and well defined in the middle (except near base) and become denser towards the front sides, where they are much as on the head; the carina divides the hind angles into two very unequal portions, a small subrugose inner one, and a much wider and almost impunctate outer one. The hind coxae at their longest part are quite as long as the part of the metasternum immediately behind them. Ten specimens were obtained, including one from moss.

Glyphochilus kentiae, n. sp.

Castaneous, appendages castaneo-flavous. With rather dense, stramineous pubescence.

Head with crowded punctures of moderate size. Antennae thin, extending almost to abdomen, third joint almost twice the length of second, and about half the length of fourth. Prothorax with sides obliquely increasing in width to base, moderately strongly to about basal third, less strongly to base; with punctures on front sides much as on head, somewhat smaller about middle, and still smaller and sparser about base; hind angles acute, moderately long and unicarinate.

Elytra gradually decreasing in width from shoulders to apex; narrowly striate; interstices conspicuously granulate-punctate about base, the punctures becoming smaller, sparser, and less asperate posteriorly. Tarsi narrow, lobe of fourth joint thin. Length, 8-9 mm.

Lord Howe Island (A. M. Lea). Type, I. 5672.

The carina of the hind angles of the prothorax is so placed that the outer portion of the angle is considerably larger than the inner. The base of the elytra and the scutellum have a more reddish tone than elsewhere, the base of the head is usually infuscated; the mesosternum and metasternum are somewhat darker than the rest of the under surface. Six specimens were obtained from *Kentia* palms.

***Glyphochilus inconspicuus*, n. sp.**

Piceous, some parts castaneous; appendages of a more or less dingy flavous. Rather densely clothed with stramineous pubescence. Length, 6-8 mm.

Lord Howe Island (A. M. Lea). Type, I. 5675.

Structurally close to the preceding species, but considerably smaller and darker, head with more crowded punctures, antennae somewhat stouter, with third joint not twice the length of second, and less than half the length of fourth, prothorax with a vague median line, carina of hind angles dividing these into more equal parts, and punctures more crowded, elytra more conspicuously granulate and with distinct punctures in the striae towards base. The parts more conspicuously castaneous than piceous are the base and hind angles of prothorax, scutellum, apical half of suture, and sometimes the margins of elytra, and most of the under surface. Four specimens were obtained. A small (6 mm.) specimen probably belongs to this species, but is reddish-castaneous, the flavous legs and infuscate base of head excepted.

***Glyphochilus waterhousei*, n. sp.**

Reddish-castaneous, legs paler, antennae (two basal joints excepted) infuscated. Rather densely clothed with stramineous pubescence.

Head with crowded, subreticulate punctures. Antennae thin, third joint about once and one half the length of second and about half the length of fourth. Prothorax with sides somewhat rounded in front, thence feebly increasing in width to base, median line vaguely defined, hind angles very acute and unicarinate; punctures quite as crowded on the front sides as on head, but rather less crowded elsewhere. Elytra parallel-sided from shoulders to near apex; narrowly striate; with subasperate, scarcely granulate, punctures about base, becoming smaller and sparser posteriorly. Tarsal lobes comparatively wide. Length, 9.5 mm.

Lord Howe Island (A. M. Lea). Type, I. 5674.

The above description is of the smaller of two specimens; the larger (11 mm.) one has the antennae uniformly coloured and very little darker than the legs, two vague infuscate longitudinal blotches on the pronotum, and the outer portion of the basal angles somewhat smaller than the inner (on the type they are about the same size). The elytra of both are much less conspicuously granulate-punctate than on either of the preceding species, although there are a few granules about the base. The type was from the summit of Mount Gower, the larger specimen from much lower down. The species is named in honour of the late Mr. J. B. Waterhouse of the island.

***Ochosternus*⁽¹⁾ *howensis*, n. sp.**

Black with a feeble bronzy gloss, appendages obscurely reddish. Moderately clothed all over with light-brownish pubescence.

(1) Cand., Mon. Elat., iv., p. 445; Sharp, Ann. and Mag. Nat. Hist., May, 1877, p. 25; Broun, Man. N.Z. Col., p. 298.

Head evenly rounded in front, with the margin shining but not carinated; with dense and rather coarse punctures. Antennae extending almost to abdomen, second joint small, third not much longer, fourth-tenth strongly serrate internally, of almost equal lengths, but slightly diminishing in width, eleventh slightly longer than tenth. Prothorax slightly longer than wide, sides very feebly sinuous, hind angles acute and passing scutellum, acutely obliquely unicarinate; median line rather wide and distinct posteriorly, feeble elsewhere; punctures in front slightly smaller but almost as dense as on head, becoming smaller posteriorly. Elytra rather narrow, feebly and regularly decreasing in width from near base, with the apices somewhat thickened and conjointly rounded; narrowly striate, the sutural stria almost impunctate, the others with more or less distinct and behind the shoulders strong punctures; interstices about base rather densely granulate-punctate, the punctures becoming smaller, sparser and simple posteriorly. Prosternum with moderately dense, but unevenly distributed punctures, intercoxal process acute, narrow, and deflected downwards. Tarsi long and thin, fourth joint simple, claws thin but subdentate near base. Length, 15-18 mm.

Lord Howe Island (A. M. Lea). Type, I. 5676.

Differs from *O. zealandius* in being smaller, with stronger punctures, intercoxal process of prosternum more suddenly turned downwards, and with four feeble carinae between the coxae. Twelve specimens were obtained on the lower parts of the island.

***Ochosternus norfolcensis*, n. sp.**

Black with a slight bronzy gloss, appendages dull red. Moderately clothed with short, brownish pubescence.

Head with rather small and not very crowded punctures. Length, 13-14 mm. Norfolk Island (A. M. Lea). Type, I. 5677.

Structurally and in general appearance close to the preceding species, but somewhat smaller, with sparser clothing, prothorax with median line more defined, carina on posterior angle longer, and punctures everywhere somewhat smaller, more noticeably on head than elsewhere. On that species the punctures on the head are so close together that an additional one of the same size could scarcely be placed anywhere, without overlapping several others; on the present species many such punctures could be inserted without overlapping the adjacent ones. Two specimens were obtained.

TENEBRIONIDAE.

***Mesotretis pubipennis*, n. sp.**

Of a dingy reddish-brown, under surface and parts of upper surface blackish. Elytra rather densely clothed with semi-erect and rather short, greyish pubescence, somewhat shorter and paler on under surface, still shorter on head and prothorax.

Head wide; with dense and small but fairly sharp punctures; clypeal suture in the form of a shallow, curved impression, slightly deepened close to each antennary ridge. Antennae moderately long, third joint distinctly longer than second or fourth, three apical joints enlarged, somewhat darker than the others, and forming a conspicuous but loosely compacted club. Prothorax strongly transverse, sides gently rounded and widest near apex, apex very gently incurved to middle, lateral margins comparatively wide and slightly dilated to base, each hind angle with a slight outer projection, basal margins very narrow; punctures small and rather dense. Elytra distinctly wider than base of prothorax, shoulders gently rounded, parallel-sided to near apex, with a shallow longitudinal depression on each side of base near the shoulder; punctures dense, sharply defined, and of

moderate size. Under surface with dense and sharply defined punctures, but somewhat uneven in sizes. Length, 4.2-4.5 mm.

Lord Howe Island (A. M. Lea). Type, I. 6621.

Considerably wider than *M. ferruginea* or *fumata*, and with the lateral margins of the prothorax decidedly wider, elytra conspicuously clothed, etc. Probably it would have been referred to a new genus, but for its alliance with *fumata*; the penultimate joint of the tarsi is very slightly bilobed, but still it is bilobed, and the clothing of the under surface of the tarsi is as on that species. The head gradually changes from blackish at the base, to the general dingy brown in front; the scutellum, the prothoracic and elytral margins, and a rather wide sutural space are more or less blackish. The elytral punctures are much larger than the prothoracic ones. Six specimens were obtained on tree-ferns on Mounts Gower and Ledgbird.

Mesotretis fumata, n. sp.

Blackish or smoky-brown, in places more or less conspicuously testaceous, appendages testaceous or castaneous, femora sometimes infuscated.

Head with dense and sharply defined but rather small punctures, with a feeble depression close to each antennary ridge. Antennae almost as long as head and prothorax combined, third joint almost as long as fourth and fifth combined, ninth and tenth transverse, their combined length slightly greater than eleventh, and, with it, forming a loosely compacted club. Prothorax moderately transverse, sides gently rounded and slightly wider at apex than at base, lateral and basal margins very narrow; punctures slightly larger and sparser than on head. Elytra distinctly wider than prothorax at base, sides feebly dilated to beyond the middle; punctures somewhat sparser and distinctly larger than on prothorax. Length, 3.5-4.2 mm.

Norfolk Island (A. M. Lea). Type, I. 6620.

In general outlines very close to *M. ferruginea*, except that the prothorax is slightly longer, but very differently coloured, antennary swellings more pronounced, the antennae longer, with the third joint distinctly longer, and the club more loosely compacted; the elytral epipleurae are narrower and the punctures of the upper surface denser and more sharply defined; the clothing of the tarsi is much the same, but the bilobing of the penultimate joint of the four hind ones is less pronounced, although even on *ferruginea* those of the four hind ones are less pronounced than on the front ones. The head, except for the mouth parts, is uniformly black or blackish, the prothorax is usually blackish, but diluted with red at the apex and along a median line; on some specimens the paler markings are very conspicuous, but on others they are scarcely traceable; the elytra are mostly of a dingy testaceous, with the suture and epipleurae narrowly black, and a large but indefinite infuscated patch on each elytron, the patches sometimes but little darker than the ground colour; the sterna are usually blackish, and the abdomen in parts, more especially at the apex, diluted with red. One small specimen has the elytra uniformly almost flavous, except that the suture and margins are narrowly infuscated. From some directions the sides of the elytra appear to have extremely short and sparse pubescence, but it is invisible from most directions. From some directions the prothoracic margins appear to be feebly serrated, but from others they appear to be even. Seventeen specimens were obtained.

Mesotretis glabra, n. sp.

Black, shining; elytra and abdomen in places obscurely diluted with red, appendages castaneous. Glabrous.

Head moderately wide, evenly convex between eyes, these small; with dense and sharply defined punctures of moderate size in front, becoming very small towards base; antennary ridges rather long and slightly elevated; clypeal suture

feeble. Antennae rather short, second joint slightly longer than third, fourth-eighth smaller, ninth-eleventh slightly larger than the preceding ones, and forming a loosely compacted club. Prothorax rather strongly transverse, base and apex equal, sides gently and evenly rounded, front angles feebly produced, lateral and basal margins narrow; with dense and sharply defined, but not very large punctures. Elytra parallel-sided, outlines almost continuous with those of prothorax; punctures slightly larger than on prothorax, but rather less sharply defined. Length, 4.25 mm.

Norfolk Island (A. M. Lea). Type, I. 6623.

The dense clothing of the tarsi, with the slight lobing of the penultimate joint and considerably narrower elytral epipleurae, are indicative that the species should be referred to *Mesotretis*, rather than to *Araucaricola*, although at first glance it appears to be an unusually narrow specimen of *A. ebenina*. The eyes are somewhat narrower than in all the other known species of *Mesotretis*. The elytra are very faintly shagreened. A single specimen was taken from the dead frond of a tree-fern.

Araucaricola, n. gen.

Head wide; clypeus narrow, at sides elevated into antennary ridges; labrum short. Eyes small, lateral, coarsely faceted. Antennae rather short, with a three-jointed, loosely compacted club. Apical joint of maxillary palpi large and securiform. Prothorax wide, with conspicuous margins. Scutellum very short and wide. Elytra parallel-sided, the width of prothorax, margins narrow and continuous to apex; epipleurae wide at base, and gradually narrowed to apex, concave from base to end of metasternum, convex beyond same. Metasternum rather long, episterna parallel-sided and not very narrow. Abdomen with three basal segments large, the others small. Legs rather short, front coxae slightly separated, almost basal, cavities closed, middle coxae moderately, the hind ones more widely separated; femora stout, tibiae terminated by two small spines, and sexually variable; tarsi short, claw joint about as long as the rest combined, penultimate joint small and simple. Wings ample.

In many respects this genus is close to *Mesotretis*, near which it should be placed, but the eyes are smaller, with a greater proportion on the under surface, elytral epipleurae wider, tarsi more sparsely clothed on the under surface, with the penultimate joint slightly narrower than the preceding one, and not bilobed, and the claw joint considerably longer in proportion. At first glance the penultimate joint appears to be slightly produced under the base of the following one, but this appearance is really due to a few projecting hairs or setae. The sexes may be readily distinguished by the front and hind tibiae. Numerous specimens were taken under rotting bark of the Norfolk Island pine, *Araucaria excelsa*; in general appearance they are much like *Asphalus ebeninus* on a greatly reduced scale.

Araucaricola ebenina, n. sp.

♂. Black, shining; palpi, legs, and parts of antennae castaneous.

Head evenly convex between eyes, with dense and small but sharply defined punctures; an oblique impression from each side of the clypeal suture to behind the eye. Antennae extending to base of prothorax, first joint moderately large, second somewhat shorter than third, and slightly longer than fourth, ninth and tenth transverse, eleventh slightly wider and longer than tenth. Prothorax about twice as wide as long, sides almost parallel but gently rounded in front, front angles slightly produced to clasp the head, margins rather narrow in front, but dilated to base; punctures much as on head. Elytra with outlines almost continuous with those of prothorax; punctures dense, sharply defined, and distinctly larger than on prothorax, but becoming quite as small posteriorly. Front tibiae moderately wide and parallel-sided, but near base suddenly narrowed and curved;

hind tibiae longer than the others (about as long as the third abdominal segment is wide), conspicuously bisinuate and somewhat thickened at apex. Length, 4.0-4.5 mm.

♀. Differs in having somewhat thinner antennae, front tibiae decidedly thinner and not suddenly narrowed near base, and the hind ones much shorter and almost straight.

Norfolk Island (A. M. Lea). Type, I. 6622.

The basal joint of the antennae is black and shining, the following joints are either entirely castaneous, or change from infusate to castaneous, but the infuscation seldom extends beyond the fourth joint. There is some extremely fine pubescence on the clytra and under surface, but it is invisible from most directions. Several specimens are more of a piceous-brown than black, but probably from immaturity.

***Trachyscelis howensis*, n. sp.**

Colour variable. Under surface, sides and legs with straggling, yellowish or stramineous hairs.

Head scarcely visibly punctate, with a rather deep groove from eye to eye. Antennae short, five apical joints forming a robust club. Prothorax polished and impunctate, sides and base very narrowly margined. Elytra slightly dilated to beyond the middle; each with a distinct subsutural punctate stria from base to apex, a second conspicuous row of punctures, becoming striate posteriorly, then with six rows of small punctures, becoming very feeble towards the side, the side with a marginal slightly punctate stria; interstices sparsely and minutely punctate. Legs short and stout, front tibiae moderately dilated from base but suddenly inflated at apex, the others rather strongly dilated from base to near apex, and with short, dense, stout setae. Length, 3.0-3.5 mm.

Lord Howe Island (A. M. Lea). Type, I. 6589.

In general appearance very close to *T. ciliaris*, but with the ciliation of the sides much less pronounced, and the median line of the pronotum altogether wanting; from *T. laevis* it differs in being larger and more robust, and in the more conspicuous elytral punctures; *T. niger* is a considerably wider species, with stronger striation. Numerous specimens were obtained at roots of beach-growing plants, under seaweed, and washed up wood, etc. Two colour forms appear to be equally abundant; the first, including the type, black or blackish, with the muzzle and sides of prothorax and of elytra more or less distinctly diluted with red, and all the appendages more or less castaneous; the second form is entirely castaneous; but a few specimens are intermediate. The straggling hairs are fairly numerous on the under surface and legs, but rather sparse on the sides of the prothorax and elytra, scarcely one-fourth as dense as on *ciliaris*.

***Brachycilibe araucariae*, n. sp.**

Black or blackish, antennae, palpi and tarsi castaneous, parts of under surface sometimes diluted with red. Under surface almost glabrous, the upper quite so.

Head wide, gently convex, obliquely flattened in front, with a small impression marking each side of the clypeal suture; with moderately dense and sharply defined but rather small punctures. Antennae short, tenth and eleventh joints forming a club, tenth strongly transverse, much wider than ninth, and slightly wider than eleventh, the latter almost circular. Prothorax not twice as wide as long, evenly convex from margins, which are moderately wide throughout, sides gently rounded and wider at base, which is truncate, than at apex, which is feebly incurved to middle; punctures slightly larger than on head. Elytra the width of prothorax, parallel-sided from base to the widely rounded apex; regularly punctate-striate, the striae sharp and well defined, but the punctures rather small and close together, interstices with minute punctures; epipleurae rather wide from

base to near apex, where they are suddenly narrowed by the apical ventral segment, wrinkled and rather finely punctate. Legs short; front tibiae slightly serrated externally and dilated to apex. Length, 3.7-4.0 mm.

Norfolk Island (A. M. Lea). Type, I. 6588.

Fairly numerous in and under rotting bark of the Norfolk Island pine. In general appearance fairly close to *B. antennata*, but slightly narrower cephalic excavation wanting, prothorax narrower at apex and without an apical depression (on *antennata*, although not mentioned in the original description, there is invariably such a depression), elytral striation more pronounced, and legs not quite so stout. Specimens entirely black on the upper surface usually have parts of the under surface distinctly diluted with red, more especially parts of the sterna and the elytral epipleurae; many specimens, however, have the upper surface of a livid-testaceous, with the under surface and legs paler, but variegated with dark brown.

MELANDRYIDAE.

Talayra brevipilis, n. sp.

Black, appendages castaneous-brown. Densely clothed with short, brownish pubescence.

Head with very dense, minute punctures. Eyes large, subreniform. Antennae long and thin, second joint about one-third the length of third, the latter slightly shorter than first, and slightly longer than fourth. Prothorax moderately transverse, sides strongly rounded, base slightly bisinuate, and considerably wider than apex, hind angles obtuse; punctures not quite as dense as on head but of similar size; marginal carina on each side acute about base, but vanishing before the middle. Elytra very feebly diminishing in width posteriorly, slightly but distinctly striated; with very dense and small punctures, somewhat transversely or obliquely arranged towards base. Tibiae transversely serrated on upper surface, serrations on front pair less distinct than on the others, and partly obscured by a longitudinal ridge; spurs to hind pair unequal, the shorter about half the length of the following joint. Length, 11-13 mm.

Lord Howe Island (A. M. Lea). Type, I. 6098.

A long thin species, longer than any other Australian member of the family, except *Ctenoplectron humerale*. From *T. elongata* it differs in its much larger size, darker colour (an occasional specimen of *elongata*, however, is almost as dark), finer punctures, and more conspicuous elytral striation. Although the derm is black, it is everywhere so closely covered by pubescence that to the naked eye it appears to be of a somewhat rusty-brown, but from other directions it appears to have a silken gloss; from some directions the abdominal segments appear to be tipped with golden-red. The punctures are normally somewhat obscured by the clothing. Three specimens were obtained.

TALAYRA ELONGATA, MacL.

Innumerable specimens of this species were seen at night running over the bark of newly-felled trees on Lord Howe Island. In the light of the lamp they had the appearance of small and extremely active ants; larvae and pupae were also seen in the bark of old banyan logs. The length of the island specimens varies from 3 to 6 mm., the average being about 4 mm.

CANTHARIDAE.

Goetymes helenae, n. sp.

♂. Black, elytra, sides of prothorax, antennae (most of rami excepted), palpi, and legs of a more or less dingy light-brown, or testaceous. Densely clothed with very short, dark pubescence.

Head lobed at base, with a slight but distinct median line; with crowded punctures, well defined about base, but with a subgranulate appearance elsewhere. Eyes deeply semi-circularly notched, median portion very thin, inner lobe smaller than outer, the notched space gently convex and with crowded punctures. Antennae inserted slightly in front of eyes, first joint curved and moderately stout, the nine following ones very short, but the fourth to tenth each with a very long ramus, eleventh joint almost as long as the ramus of tenth. Prothorax at base wide and very slightly sinuate, sides strongly diminishing in width to apex, which is hardly more than one-third the width of base of head, with a moderately well-defined median line, a rather shallow longitudinal impression on each side; with crowded and rather small punctures. Scutellum with a median ridge, punctures as on pronotum. Elytra slightly wider than base of prothorax, sides from near base strongly narrowed to about middle, and then subparallel to near apex; each with three feeble longitudinal elevations, of which the one nearest the suture is longer and more distinct than the others; with dense and minute punctures. Abdomen extending well beyond elytra. Legs long and thin. Length, 7.75 mm.

Lord Howe Island (Mrs. A. M. Lea). Type, I. 6142.

Much smaller and otherwise different from the previously described species of the genus. The clothing of the head from directly above is rather indistinct, but when viewed from the sides is seen to be dense and erect, although short. The prothorax is so narrow in front, and wide at the base, that at first glance it appears to be almost triangular. A single specimen was taken on the summit of Mount Gower by my wife, after whom I have named it. It is one of the most curious species occurring on the island.

CURCULIONIDAE.

Eutinophaea bicristata, n. sp.

♂. Dark reddish-brown, legs and antennae paler. Densely clothed with fawn-coloured scales mixed with darker and paler ones, on the under surface almost white. In addition with sloping setae, mostly dark, but varying to whitish.

Head with dense, concealed punctures. Eyes almost round. Rostrum with a feeble median line, muzzle glabrous; scrobes with upper portion rather short and wide, lower portion narrow and oblique. Scape somewhat curved, apex stout, two basal joints of funicle rather long, the first longer and stouter than second. Prothorax strongly convex, about as long as the greatest width, sides strongly and evenly rounded, punctures normally concealed. Elytra not much wider than widest part of prothorax, but considerably wider than its base, almost parallel-sided to beyond the middle; with rows of large, partly concealed punctures, odd interstices slightly elevated above the even ones, but the third abruptly and strongly elevated into a setose crest from slightly beyond the basal third to near the summit of the apical slope, the beginning of the crest usually black. Abdomen with first segment slightly concave in middle. Front tibiae rather strongly curved. Length 2.7-3.2 mm.

♀. Differs in having the prothorax slightly longer, its sides less inflated, and two basal segments of abdomen rather strongly convex.

Queensland: Montville, in August (W. A. T. Summerville); Mount Tambourine, in January (A. M. Lea).

Very distinct from all other known species of the genus by the conspicuous crests on the elytra of the male, on the female the crests are only slightly indicated. There are usually two curved dark spots at the base of the prothorax and several small ones on the elytra, the paler spots are mostly confined to the sides of the prothorax and the apical slope of the elytra, but on several specimens the clothing of the upper surface is almost uniformly brown.

Mr. R. Veitch, Chief Entomologist of the Queensland Department of Agriculture, reports that this species is destructive to citrus foliage; the "Dicky Rice" *Eutinophaea spinipes* Blackb. (*Prosayleus phytolymus* Olliff), of orchardists near Sydney is also troublesome to citrus fruits.

CERAMBYCIDAE.

OBEREA MUNDULA Pasc.⁽²⁾

A very narrow longicorn from Cairns (Queensland) and another from the Madang district (New Guinea) appear to belong to this species, originally described from Waigiou and Salwatty. They are of a rather dingy flavous-red, with the elytra, except for the basal sixth, four apical segments of abdomen (a small part of the base of each excepted) and the antennae black or blackish. The figure⁽³⁾ of *O. gracillima* will give a good general idea of the species, except that the figure has less of the base of elytra pale, and the antennae longer.

ECZEMOTES⁽⁴⁾ CONFERTA Pasc.⁽⁵⁾

Specimens of this species have been taken at the Coen River (Queensland) by Messrs. W. D. Dodd and H. Hacker. It was originally described from Aru, and as a *Penthea*, but was subsequently made the type of the genus *Eczemotes*.

Somatidia olliffi, n. sp.

Pale castaneo-flavous. Head, under surface and appendages, with whitish pubescence, and some scattered hairs; prothorax sparsely pubescent and with some long hairs, of which those in front are directed backwards; elytra without pubescence, but with numerous long hairs subseriately arranged.

Head with dense fine punctures, and some of larger size between eyes. Antennae distinctly passing elytra, fourth joint slightly longer than third. Prothorax moderately transverse, sides strongly and evenly rounded; with fairly dense and moderately large punctures, becoming smaller and sparser about base. Elytra ovate, widest at about basal third; with larger punctures than on prothorax, but becoming much sparser and smaller posteriorly. Femora stout, front tibiae short and feebly notched on lower surface, middle tibiae feebly notched on upper surface; hind tibiae slightly longer than the others, but not notched. Length, 3-4 mm.

Lord Howe Island (A. M. Lea). Type, I. 5460.

A small pale species, of which seven specimens were beaten from a recently felled *Pandanus* tree. The clothing of the prothorax is to a certain extent as on *S. capillosa*, but the elytra are entirely without pubescence, although with numerous long hairs; these appear to be in five rows on each elytron, but the sutural and lateral rows are rather feeble. The tarsi, especially the front pair, are very wide on both sexes.

Somatidia tricolor, n. sp.

Head, prothorax and under surface dark-reddish-castaneous, elytra bronzy, with a slight greenish gloss; appendages flavous; parts of antennae slightly infuscated. Clothed with fine, ashen pubescence, and with fairly long hairs, more noticeable on prothorax and elytra than elsewhere.

Head with dense and fine punctures. Antennae distinctly passing elytra, fourth joint longer than third. Prothorax distinctly transverse; with dense but not very large punctures, becoming smaller about base. Elytra ovate, widest at

(2) Pascoe, in Longicornia Malayana, in Trans. Ent. Soc. Lond., iii. (Ser. 3), 1867, p. 432.

(3) *L.c.*, pl. xvi., fig. 9.

(4) *L.c.*, p. 79.

(5) *L.c.*, p. 80; and v. (Ser. 2), p. 40.

about basal third, with dense and large punctures, in places subconfluent, but becoming much smaller posteriorly. Legs much as on preceding species. Length, 3 mm.

Lord Howe Island (A. M. Lea). Type, I. 5461.

The colours are much as on *S. aranea*, but the elytra are clothed both with pubescence and long hairs, the latter are more or less upright and in five or six rows on each elytron. There are fairly numerous hairs on the front of the prothorax, nearly all directed backwards, but the species is much smaller and otherwise very different from *S. capillosa*. Two specimens, apparently males, were obtained, one by sieving fallen leaves.

Somatidia villosa, n. sp.

Head, prothorax and under surface dark-reddish-castaneous, elytra bronzy, appendages flavous but with third to eleventh joints of antennae and middle of femora and of tibiae somewhat infuscated. Clothed with fine ashen pubescence, sparser on prothorax than elsewhere; with numerous very long yellowish hairs.

Head with dense small punctures, interspersed with some larger ones. Antennae distinctly passing elytra, third joint scarcely longer than fifth and conspicuously shorter than fourth. Prothorax moderately transverse, sides strongly and evenly rounded; with crowded but not very large punctures. Elytra ovate, at basal fourth almost twice the width of extreme base; with crowded punctures slightly larger than on prothorax, but almost vanishing posteriorly. Femora very stout; front tibiae conspicuously notched on lower surface. Length, 3.5-5.0 mm.

Lord Howe Island (A. M. Lea). Type, I. 5459.

Readily distinguished from the other island species by the very long hairs, many of those on the elytra are quite as long as the prothorax is wide, many also are curved forwards or sideways; on the prothorax, antennae and legs also, the hairs are of quite unusual length. On *S. capillosa*, a considerably larger species, the long hairs on the elytra are much shorter and more rigid; the longer hairs on its antennae are fairly numerous, but much shorter than their supporting joints, and nearly all project downwards; on the present species the long hairs are often quite as long as their supporting joints, and on about eight of the joints are fringe-like near the tips; on the pronotum, also, the majority of the long hairs in front do not conspicuously project backwards as on most species of the genus. Five specimens were obtained, three by sieving fallen leaves.

The genus *Somatidia* is abundantly represented in New Zealand, but as yet species are unknown from the mainland of Australia; those from Lord Howe Island may be tabulated as follows:—

A. Prothorax longer than wide, size 10 mm. ⁽⁶⁾	<i>pulchella</i>
AA. Prothorax transverse, size much less than 10 mm.	..	..	..	..	..
B. Elytra glabrous ⁽⁷⁾	<i>aranea</i>
BB. Elytra not glabrous.	..	..	..	..	..
C. Elytra with long hairs but without pubescence	..	..	..	..	..	<i>olliffi</i>
CC. Elytra with long hairs and pubescence.	..	..	..	..	..
D. Long hairs on antennae frequently as long as their supporting joints	..	..	..	..	..	<i>villosa</i>
D.D. Long hairs on antennae always much shorter.	..	..	..	..	..
E. Legs uniformly pale	..	..	..	..	..	<i>tricolor</i>
EE. Legs not uniformly pale	..	..	..	..	..	<i>capillosa</i>

Porithea parenthetica, n. sp.

Rusty-brown, elytra (a subtriangular basal space and an irregular post-median blotch excepted), basal half of femora, tibiae (tips excepted), parts of tarsi and antennae (tips excepted) of a more or less dingy flavous. Clothed with

⁽⁶⁾ From description.

⁽⁷⁾ There are usually, but not always, from one to three hairs on the base of each elytron.

very short, pale pubescence, denser and more sericeous in appearance on the prothorax and under surface than elsewhere; a few long hairs scattered about, but becoming numerous on antennae.

Head with small, dense, concealed punctures; clypeal suture subfoveate on each side, median line well-defined except posteriorly. Antennae slightly passing

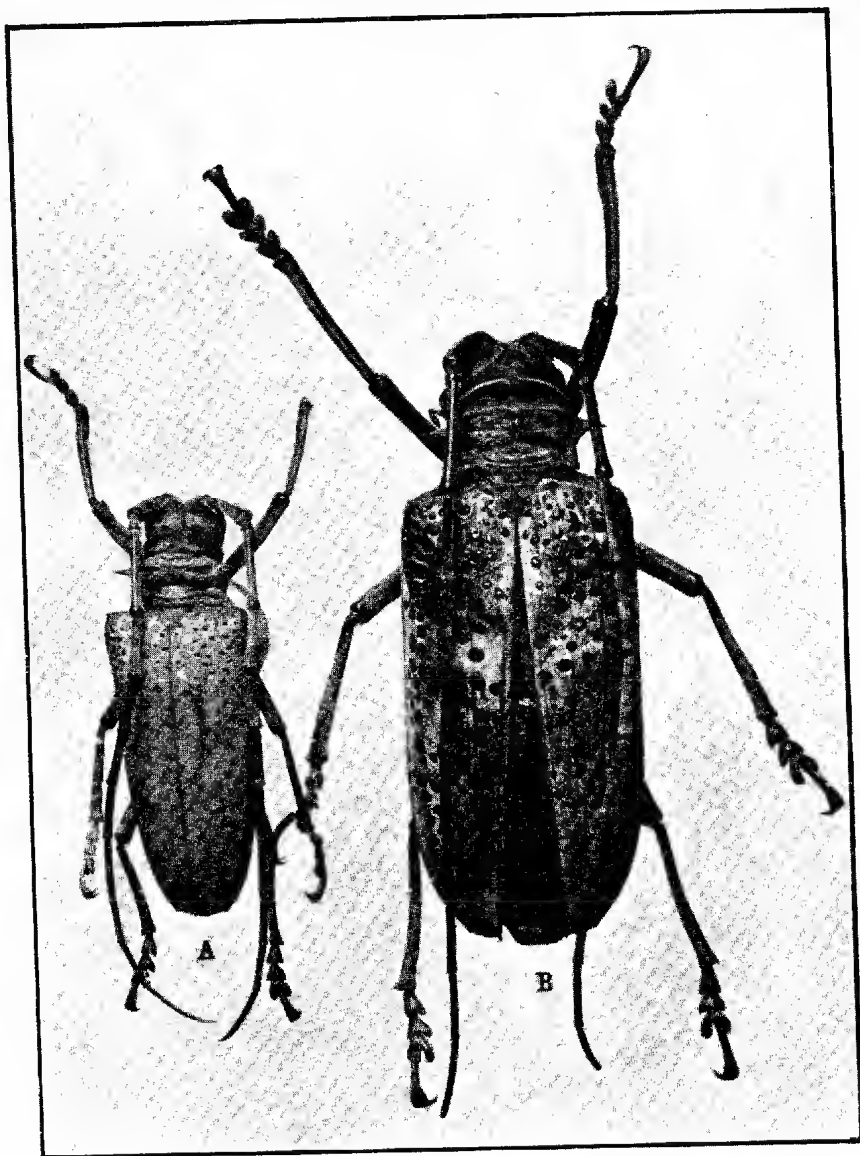


Fig. 4.

Rosenbergia megaloccephala v. d. Poll., natural size.
A, from Queensland; B, from Komba.

elytra in female, considerably in male, spine at tip of third joint very distinct; on the fourth and fifth much shorter. Prothorax distinctly longer than wide, sides rounded and widest slightly in front of middle; with three discal elevations, a median one not continuous to base or apex, and two parentheses-like ones;

punctures dense but rather small. Elytra not much wider than greatest width of prothorax, parallel-sided to near apex, where each is separately rounded; about base with dense and rather coarse punctures, gradually becoming sparser and smaller, till at the apex they are very small and sparse; with two vaguely elevated lines on each elytron. Femora clavate. Length, 12-17 mm.

Lord Howe Island (A. M. Lea). Type, I. 5452.

Structurally close to *P. plagiata*, but with very different markings. The darker parts of the elytra are somewhat variable, the subtriangular basal space is somewhat dilated about the shoulders, and on five of the specimens is connected along the suture with the postmedian blotch, this is widest at the suture, and rapidly narrows to the middle of each elytron, where it sometimes terminates, but on some specimens it is irregularly angularly connected with the sides; the sides at the base are usually infuscated. The elevations on the prothorax are roughly like (I), the outer ones, however, are somewhat swollen at their ends, so as to appear like obtuse tubercles. Owing to the clothing the prothoracic punctures are not very sharply defined; on the elytra, in addition to the ordinary ones, there are some slightly larger ones in feeble series, a row close to the suture on each side is readily seen, but not the others; the linear elytral elevations are fairly distinct on some specimens (although not sharply defined), but scarcely traceable on others. The male is smaller than the female, with the prothorax somewhat longer, antennae and legs longer, and front tibiae rather more noticeably (although not strongly) curved, and somewhat wider at the apex. Twelve specimens were taken on trunks of newly felled trees at night.

ROSENBERGIA MEGALOCEPHALA v. d. Poll, var.

A specimen from New Guinea (Komba, Rev. L. Wagner), appears to represent a variety of this species. It is longer (70 mm.) than any specimen I have seen from Australia, and the shining granules on the elytra are larger, more numerous and more evenly distributed, although more numerous about the shoulders than elsewhere. It has some ochreous patches of pubescence on the head and prothorax, and at the base of elytra. In the accompanying photograph (by Mr. B. Cotton) it is shown beside a specimen of normal size from Queensland.

CHRYSOMELIDAE.

Chrysomela multimaculata, n. sp.

Pale flavous, with numerous black spots.

Head with crowded punctures of moderate size; clypeal suture gently arched. Antennae long and thin. Prothorax about thrice as wide as the median length, front angles produced, hind ones obtuse; punctures about as large as on head but less crowded. Elytra slightly dilated to beyond the middle; with rows of rather large punctures, becoming smaller posteriorly, the interstices with numerous small punctures; epipleurae narrow, not at all concave. Legs moderately long, claws simple. Length, 7 mm.

South Australia: Barton (A. M. Lea). Type, I. 17111.

The intercoxal process of the prosternum is narrow and very feebly bilobed at the base, but other characters agree with those of *Chrysomela*. Its markings are very different from those of any other species of the subfamily before me. The black markings on the type are:—Four transverse spots on the head (two between eyes and two at base); four across middle of prothorax, three series of spots and vittae on elytra, a spot on each metasternal episternum, knees, tips of tibiae, tarsi, antennae (except parts of three basal joints), apical joint of palpi, and the jaws. Of the series on each elytron the first consists of a spot touching the suture, and narrowly connected at the base with a humeral vitta, which diverges

posteriorly to form a reversed Y, a free vitta on the fourth, and a longer one on the sixth connected with the base; the second consists of a curved series of three spots at the basal third, of which the curve includes the tips of the Y; the third consists of three spots beyond the middle, and a narrow vitta extending to near the apex; the apical third of the suture is also narrowly black. A second specimen has markings much as on the type, except that on the left elytron the inner arm of the Y is free, and that on the right one it is almost free. Some of the elytral interstices are much wider than others, the outer one is widest of all.

***Calomela flavida*, n. sp.**

Flavous, five or six apical joints of antennae more or less deeply infuscated.

Head with rather numerous and small but sharply defined punctures; clypeus with somewhat smaller punctures than on the surface behind it, its suture widely triangular. Antennae comparatively long and thin. Prothorax more than thrice as wide as long, sides gently decreasing in width to beyond the middle, and then more strongly to apex; punctures somewhat sparser and stronger than on head but becoming very small in front. Elytra with outlines continuous with those of prothorax; with regular rows of rather small punctures, the interstices with minute punctures. Length, 5-6 mm.

Queensland: National Park, in November (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

A small, pale species, about the size of *C. vacillans*, and very similarly coloured, but seriate punctures of elytra regular and much smaller (owing to "waterlogging," however, they appear much larger than they really are), prothorax less transverse and with much smaller punctures. *C. tarsalis* has considerably wider antennae and dark tarsi. *C. pallida*, and the pale variety of *C. crassicornis*, have wider antennae and much coarser punctures on sides of prothorax and on head. *C. monochromatea*, *geniculata*, *flavescens*, and *cephalotes* are more elongate species. *C. intemerata* has entirely pale antennae, and *C. bimaculiceps* has bimaculate head, etc. The seriate punctures on the elytra are not one-fifth of the width of the interstices, but owing to "waterlogging" about the base from some directions they appear to be almost as wide, posteriorly, however, their apparent size becomes much smaller. The largest punctures are on the metasternum. On two of the specimens the third joint of the front tarsi is somewhat infuscated.

***Calomela maculiceps*, n. sp.**

Of a dingy brownish-flavous, a large medio-basal spot on head, six apical joints of antennae, tips of palpi, scutellum, metasternum, knees, tibiae and tarsi black or blackish.

Head with fairly large punctures mixed with minute ones, clypeal suture rather feeble and irregular, with a feeble median line. Antennae long and thin, no joint transverse. Prothorax more than thrice as wide as long, sides feebly diminishing in width to near apex; with mixed punctures as on head. Elytra very little wider than prothorax; with regular rows of moderately large punctures, becoming smaller and closer together posteriorly; interstices with minute punctures. Punctures on metasternum almost confined to the margins. Legs stout. Length, 6 mm.

Queensland: Rockhampton. Type, I. 17105.

A rather narrow species, distinct from all the other pale species by the single spot on its head and the black scutellum. *C. bimaculiceps*, to which it is structurally close, has the head bimaculate and legs partly blue. The prothorax itself is actually immaculate, but, owing to its transparency, appears to have a continuation of the spot on the head.

Calomela picticornis, n. sp.

♂. Bright metallic green, with a coppery gloss, under surface and base of femora reddish, four basal joints of antennae reddish, the four following ones black, the three apical ones white, but tip of eleventh infuscated.

Head with a few distinct punctures in front, clypeal suture deep, a short median line joining its middle. Antennae short and dilated to near apex, with several joints transverse. Prothorax about thrice as wide as long; with rather small but sharply defined punctures, slightly larger and more numerous on sides than in middle, but nowhere crowded. Elytra scarcely wider than prothorax at base; with regular rows of rather small but sharp punctures, the interstices with scarcely visible punctures. Apical segment of abdomen impressed in middle. Claws bifid. Length, 4.5-5.0 mm.

♀. Differs in having six apical joints of antennae black, apical segment of abdomen evenly convex, and basal joint of tarsi smaller.

Queensland: National Park, in October and November (H. Hacker). Types, in Queensland Museum; cotypes, in South Australian Museum.

A small, compact, metallic green species with distinctive antennae in male. The anterior end of the intercoxal process of the prosternum slopes downwards, so the species is evidently not a small *Augomela*, as it appears at first, but may be referred to *Calomela* and to the vicinity of *C. ruficeps* and *pulchella*, although it is somewhat wider in proportion than those species. Of two females one agrees perfectly in colour (except for the antennae) with the type, the second has each shoulder and most of the pronotum more coppery. A second male has the elytra greenish-purple, but is possibly immature.

CALOMELA GENICULATA Baly, var.

A specimen from Queensland differs from the typical form of this species in having the femora, except the base, tibiae and tarsi black.

CALOMELA MACULICOLLIS Boi., var.

A specimen, from the Upper Williams River, appears to connect *C. gloriosa* with the typical form of *C. maculicollis*; it has the brilliant blue elytra with black suture and sides of the former, the prothorax has a medioapical blue vitta, and a small spot on each side, and the head is entirely pale.

CALOMELA APICALIS Blackb.

In his description of the elytra of this species Blackburn wrote, "the punctures scarcely running in rows except near the apex." This is not correct. On the type and a cotype they are in quite distinct, although irregular rows. Three specimens, from Kuranda, mounted on one card by Mr. F. P. Dodd, evidently belong to the species, but only one agrees with the type; the others have the elytra of a beautiful deep blue, with more of the margins reddish, and the abdomen entirely pale, parts of the legs are metallic blue. These specimens agree well in colour, except that less of the legs are red, with the description of *C. cingulata*, but are much less (6 mm.) than the length (9 mm.) of that species, although the range of length is equalled by several species (*C. ioptera*, *pallida*, *digglesi*, and *suturalis*). Another specimen, from Bathurst Head, agrees well with the type.

Stethomela mirogastra, n. sp.

♂. Deep metallic green with purple markings, under surface black, labrum antennae, palpi and legs, femora excepted, flavous.

Head with sparse punctures, but becoming dense and moderately large on and about clypeus; clypeal suture deep on sides, foveate in middle. Prothorax

about four times as wide as the median length, front angles produced; with minute punctures and numerous fairly large scattered ones, becoming larger on sides, and crowded in a subbasal depression near each side. Elytra not much wider than prothorax, with regular rows of fairly large punctures, becoming larger in a posthumeral impression on each side, below which the side is dilated; interstices with minute punctures. Abdomen with an equilaterally triangular hairy flap, extending from near apex of the basal segment almost to apex of the second, apical segment with a large depression, bounded posteriorly by a pubescent ridge. Legs stout, each claw with a large basal appendix. Length, 7 mm.

♀. Differs in having the basal segment of abdomen simple, and the apical one with a median line not bounded by a hairy ridge.

Queensland: Nanango district in November (H. Hacker). Types, in Queensland Museum.

Very distinct by the abdomen of the male. At first glance the species apparently belongs to *Augomela*, but the antennae are decidedly longer and thinner than in that genus. Baly considered *Stethomela* and *Augomela* as subgenera of *Australica* (= *Calomela*); they are certainly closely allied, and, except for the antennae, I would certainly have referred this species to *Augomela*. Both antennae of the male are broken off short, but on the female they are long, thin, and somewhat dilated to apex, with no joint transverse. The purple parts of the upper surface of the male are the head, base, apex and sides of prothorax, and suture, sides and a fascia at basal third of elytra. On the female the purple parts are mostly replaced by blue or purplish-blue.

***Stethomela armiventris*, n. sp.**

♂. Brilliantly metallic, most of under surface and parts of legs reddish, clypeus and antennae flavous.

Head with irregular punctures on and about clypeus, sparse elsewhere, clypeal suture well defined, a narrow median line meeting its middle. Antennae rather long, no joint transverse. Prothorax almost four times as wide as long, sides evenly rounded; with dense and small but fairly sharp punctures, and with numerous rather large ones on sides. Elytra slightly wider than prothorax, sides nowhere quite parallel; with regular rows of punctures of moderate size, the interstices with small punctures as on pronotum. Abdomen with two triangular flaps, the first on the first segment, the other on the fifth. Legs stout. Length, 6.5-7.0 mm.

♀. Differs in having the abdomen simple.

South Australia (Blackburn's collection). Type, I. 2671.

With a remarkable abdomen somewhat as on the preceding species; the triangular hairy flap on the basal segment is much as on that species, but the apical segment also has a triangular flap, overhanging a semi-circular hairy excavation, which, on account of the flap, appears bilobed. The prothorax has the sides more rounded, the small punctures are larger and more numerous, and the large ones are smaller and sparser. The types were queried in the Blackburn collection as *Augomela pretiosa* Baly, but they differ considerably from the description of that species in colour, which apparently, except for a "violet-blue iridescence" was uniform on the upper surface, whereas on this species the prothorax and elytra have conspicuous markings; the antennae also were "black, rather longer than the thorax, the four basal joints pale piceous"; on this species they considerably pass the prothorax, and are not black. I think it possible that *pretiosa* was really founded upon a variety of *A. hypochalcea*, the male of which has a normal abdomen. The greater portion of the upper surface is metallic green or blue, with purple markings on part of the head, base apex and sides of prothorax, suture and a median vitta on each elytron extending from the middle of the base

almost to the apex, and traversed at the basal third by a wide fascia, which does not quite touch the suture. Although labelled as from South Australia, I think the types were really from Queensland or northern New South Wales.

***Stethomela ventralis*, n. sp.**

♂. Dark metallic coppery-green with purple reflections, prothorax, scutellum and under surface reddish, legs reddish and black, antennae black, some of the basal joints flavous.

Head almost impunctate, except on and about clypeus; clypeal suture semi-circular, a narrow median line joined to its middle. Antennae long and thin. Prothorax four times as wide as long, sides straight to near apex, with small scattered punctures and a foveate impression near each side. Elytra nowhere quite parallel-sided; with regular rows of punctures of moderate size, larger on a posthumeral depression than elsewhere, interstices scarcely visibly punctate. Abdomen with a wide notched flap near apex of first segment, fifth large, with a complicated hairy flap occupying the median half, the intervening segments incurved to middle. Legs stout, basal joint of each tarsus dilated. Length, 6 mm.

Queensland: National Park, in December (H. Hacker). Type, in Queensland Museum.

Differs from the males of the two preceding species in having the appendage of the basal segment of abdomen wide and notched at tip, instead of triangular, the apical segment is also more complicated. The antennae are unusually thin, and extend past the hind coxae. There are dense punctures on the pronotum, but they are almost invisible under a magnifying glass. Two males were taken, and they agree perfectly in details of sculpture, although differing in colour of prothorax and parts of under surface. As the specimen with reddish prothorax has perfect antennae, it has been made the type.

Var. Pronotum coloured as head and elytra; most of abdomen and of legs, and sides of metasternum black; basal joint of antennae flavous (the rest missing).

***STETHOMELA DISCORUFA* Lea, var.**

A specimen, from Queensland, is entirely pale, except for a narrow black ring on each elytron, the two touching at the suture; on other varieties the ring-like mark on each elytron is broken, and on some of them parts of the head and prothorax are blue.

***STETHOMELA FULVITARSIS* Jac.**

Of this species, originally described as "dark aeneous the thorax with a greenish the elytra with a violaceous tint," and distinct by its pale labrum, antennae, palpi and tarsi, there are three specimens before me, from Cairns and Kuranda, all of which have the prothorax black without the least tinge of green; two of them have a violaceous tint on the elytra (very faint on one specimen), but on the third the elytra are deep metallic green.

***Chalcomela erythroderes*, n. sp.**

Dark metallic coppery-green, suture narrowly purplish, head with purplish reflections, prothorax and under surface, except part of abdomen, red, clypeus, antennae, and most of legs black, rest of legs reddish.

Head with small punctures, but becoming stronger and crowded on clypeus; clypeal suture deep and well-defined, a deep median line joining its middle. Antennae moderately long, dilated to apex, but no joint transverse. Prothorax about four times as wide as long, sides straight to near apex, front angles well produced; with rather sparse and small punctures. Elytra briefly cordate, scarcely longer than wide; with regular rows of punctures of moderate size,

becoming smaller posteriorly, the interstices with minute punctures. Legs stout. Length, 6-7 mm.

Queensland: National Park, in November and December (H. Hacker). Type, in Queensland Museum.

A briefly ovate species, and the only known Australian member of the genus with the prothorax red. The claws are evenly and slightly dilated to the base, certainly not strongly dentate as on *Stethomela*. On *S. caudata* and *purpureipennis*, however, the dentition is not distinct from most directions, but those species are longer in proportion.

***Chalcomela aulica*, n. sp.**

Brilliant metallic green, purple and coppery; under surface, including inner parts of elytral epipleurae, most of legs and parts of muzzle reddish; antennae black, parts of basal joints reddish. Length, 6 mm.

Queensland: National Park, in November (H. Hacker). Type (unique), in Queensland Museum.

Structurally as described in preceding species, but prothorax and elytra brilliantly metallic. From *C. illudens*, and some specimens identified with doubt as *C. variegata*, it differs in its red under surface, and more conspicuous purplish markings of prothorax and elytra. The head is green, becoming purplish in front, and coppery at the base; the pronotum is narrowly purplish in front, widely purplish at base; and coppery-green across the middle; the elytra are mostly green, and coppery-green, with the suture purple, there is also a purple stripe from the side to the fourth interstice on each elytron, at the basal third, with a branch extending on and about the fifth interstice almost to the apex.

CHALCOMELA INSIGNIS Baly, var (?).

A specimen, from Moa or Banks Island, probably represents a variety of *C. insignis*, it agrees perfectly in structure with typical specimens of that species, but is entirely without coppery or coppery-green markings on the elytra; there are, however, two shades (indistinct to the naked eye) on the elytra, deep metallic blue and purple. At first glance it looks like a large specimen of *Geomela nobilis*, but the intercoxal process of the prosternum is different, and the head has a conspicuous median line.

***Lamprolina minor*, n. sp.**

Dark metallic coppery-green, head and sides of prothorax obscurely diluted with red, antennae black, legs black and red.

Head with small scattered punctures; clypeal suture deep and curved, a deep median line joining its middle. Antennae stout, but no joint transverse, eleventh one-fourth longer than tenth. Prothorax almost four times as wide as long; with numerous minute punctures, and with a few large ones towards sides. Elytra elliptic-cordate, sides nowhere parallel; with rows of small punctures, becoming smaller posteriorly, interstices with minute punctures; with a rather large post-humeral impression, on which the punctures are somewhat larger than elsewhere. Length, 6 mm.

Queensland: National Park, in December (H. Hacker). Type (unique), in Queensland Museum.

Allied to *L. simplicipennis* and *discoidalis*, from the former distinguished by its smaller size, darker prothorax and more distinct series of punctures on elytra; from the latter by its smaller size, coppery gloss of elytra, with smaller punctures and darker head and prothorax.

PHYLLOCHARIS BICEPS Lea.

The types of this species, and of its variety *alternata*, are in the Macleay Museum. Five specimens recently taken by Mr. H. Hacker, at Nanango, and in the National Park of Queensland, appear to belong to the species, but no two have the markings exactly alike. Their prothoracic and elytral markings are as follows:—

1. Prothorax with two complete black vittae, and a large spot in each front angle. Elytra with ten spots, the two apical ones conjoined to form a fascia not quite touching the sides. Fig. 5, A.
2. Prothorax as No. 1, except that the lateral spots are absent. Elytra with eight free spots, the antemedian ones conjoined to form a very irregular fascia, apical spots narrowly separated at suture. Fig. 5, B.
3. As No. 2, except that the prothoracic vittae are very narrow in front, and the lateral spots are slightly indicated.

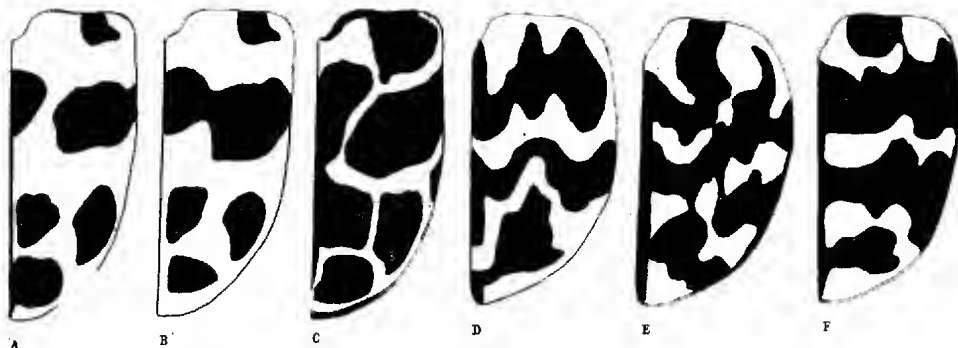


Fig. 5.

A, B, C, Elytral patterns of *Phyllocharis biceps* Lea; D, of *Oomela trifasciata* Lea; E, of *O. hieroglyphica* Lea; F, of *O. picta*, Lea.

4. Prothorax with two longitudinal vittae, spots in front angles slight infuscations only. Elytra with two free basal spots, three antemedian ones, three postmedian (the two median ones of other specimens conjoined) and a subapical fascia (representing the two free spots of other specimens).
5. Prothorax with four black vittae, the median ones about twice as wide as the others. Elytra with eight large free spots, and two large ones conjoined at the suture. Fig. 5, C.

It is probable that the name is a synonym of *P. leoparda* Baly, but in the description of that species the prothorax is described as having "*lineis duabus interruptis—nigris*"; and "on either side the medial line is a narrow longitudinal line, interrupted in the centre, pitchy black, just within the anterior angle is also a small spot," and the elytra as having eleven spots.

EULINA.

In my table of the Chrysomelides⁽⁸⁾ this genus was placed with those having "F. Apical joint of maxillary palpi securiform." This was an error, that joint is transversely oblong, and the genus should have been placed with "F. Apical joint of maxillary palpi not securiform" and associated with *Oomela*, from which however, it differs in many respects. The typical species, *E. curtisi*, is a well-known insect, occurring on the wild clematis vine near Sydney.

(8) Lea, Trans. Roy. Soc. S. Austr., 1916, p. 397.

***Eulina pulchra*, n. sp.**

Red and black, the elytra, in addition, with white fasciate markings.

Head with a few large punctures; clypeal suture curved and deep, a deep median line extending backwards from it almost to the base. Antennae long. Prothorax almost twice as wide as long, sides dilated near apex, all angles rectangular; with some coarse punctures, in places conjoined to form subfoveate impressions. Elytra elongate, about one-fourth wider than base of prothorax, shoulders rounded, sides subparallel to beyond the middle; with rows of punctures of varying sizes, mostly large between the humeral and postmedian markings and small posteriorly, the interstices almost impunctate. Length, 8 mm.

New South Wales: Barrington Tops (J. Hopson). Type, I. 17124.

Differs from *E. curtisi* and *vittata* in having sparser and coarser punctures on the prothorax, different markings on the elytra, and tibiae entirely black; the latter species has decidedly larger punctures on the elytra, with more convex interstices. The general colour is red, the prothorax has a median infuscate vitta, the antennae, tibiae, tarsi, and tips of femora are black, the elytra are black, with a slight metallic gloss, and with an irregular, white, curved mark near each shoulder, an irregular, postmedian white fascia, and a still more irregular subapical one, with a few disconnected whitish spots; the punctures on the white parts are usually infuscated, there are also the remnants of a reddish fascia at the basal third.

A specimen from Dorrig (W. Heron) probably belongs to the species, but differs in having the white markings on the elytra more apparently composed of short, conjoined, and slightly elevated vittae, the reddish fascia at the basal third paler and more broken up, and the femora black, except for a pale subapical ring.

***Eulina haematosticta*, n. sp.**

Pale flavous, antennae (upper surface of the first joint darker), six spots on elytra, knees and tarsi red.

Head almost impunctate, clypeal suture well defined, a slight curved impression some distance behind it. Antennae long and thin. Prothorax about once and one-half as wide as long, sides quite straight to near apex, apex strongly incurved to middle, base bisinuate; with rather small, scattered punctures, a curved impression directed towards each hind angle. Elytra distinctly wider than prothorax, sides scarcely dilated to beyond the middle; with rows of small to minute punctures, a shallow posthumeral depression on each side. Intercoxal process of prosternum with two rows of large punctures, notched posteriorly; claws with a large basal appendix. Length, 10 mm.

Queensland: National Park. Type (unique), in Queensland Museum.

An elongate, pale species, with three blood-red spots on each elytron; one on the shoulder, one on the middle at the basal third, and one, directly behind it, fairly close to the apex. In its thin antennae it differs from *Calomela*, and by my table of the subfamily it could be referred to *Eulina*, to which accordingly I refer it, although its appearance is very different from that of *E. curtisi*, and the other species of the genus. From some directions the elytra appear to be closely covered with fairly large punctures, or watery-looking spots, but this is entirely due to "waterlogging"; from oblique directions the seriate punctures are seen to be quite small, and they almost vanish posteriorly. On the type parts of the legs are still greenish, and it is probable that in life the insect, except for the parts now reddish, is entirely green.

***Pseudoparopsis amplipennis*, n. sp.**

Head reddish, the base deeply infuscated, prothorax and scutellum black, front margins of the former narrowly reddish, elytra deep coppery-green, their

epipleurae black, under surface and legs red, antennae black, the basal third reddish.

Head with small scattered punctures, clypeal suture distinct, a well-defined median line joining its middle. Antennae moderately long, fifth-tenth joints transverse. Prothorax at base more than four times as wide as long, sides evenly rounded, apex strongly incurved to middle; with fairly numerous punctures, varying from small to minute. Elytra across middle much wider than prothorax, sides strongly and evenly rounded; with numerous sharply defined punctures of moderate size, shoulders subtuberculate and impunctate. Legs short and stout. Length, 6.0-6.5 mm.

Queensland: Nanango district, in March (H. Hacker). Type, in Queensland Museum; cotype, in South Australian Museum.

A wide species, structurally close to *P. nitidipennis*, but slightly larger, and prothorax and scutellum black. The elytra are more than six times the length of the prothorax, their punctures are numerous but not crowded, from most directions they do not appear to be seriate in arrangement, but from others they do so appear; the series about twice as numerous as on species of other genera of the subfamily.

***Oomela nigrivitta*, n. sp.**

♂. Black and red or flavous-red.

Head with distinct but not dense punctures on and about clypeus, sparse and small elsewhere; clypeal suture curved, a feeble median line joining its middle. Antennae long and thin, no joint transverse. Prothorax at base more than thrice as wide as long; with small, scattered punctures. Elytra very little wider than prothorax at base; with regular rows of small punctures, the interstices impunctate; epipleurae somewhat undulated posteriorly. Apical segment of abdomen triangularly impressed. Length, 3.0-3.5 mm.

♀. Differs in having apical segment of abdomen evenly convex, legs thinner; with basal joint of tarsi smaller.

Queensland: National Park, in November (H. Hacker). Types, in Queensland Museum.

On most of the twelve specimens taken, the pronotum is reddish, with a wide black median vitta (the sides of the vitta gently incurved), and the elytra are black, each with a large, round, reddish spot at the basal third, nearer the suture than side; but on two of them the pronotum appears to be entirely black, although on close examination a faint lessening of colour may be noticed on the sides. The head varies from black to partly or entirely red, the under surface varies from entirely red to part of the apical segment of abdomen and the metasternum (wholly or in part) black; the legs are deep black, with the coxae trochanters and claws reddish. Of the species with two pale spots on elytra, *O. bimaculata* is smaller with prothorax and legs reddish, *O. coccinelloides* has prothorax and legs pale, and the elytral spots transverse, and a variety of *O. elliptica* has reddish legs, and prothorax reddish except for a slight basal infuscation. In the 1917 table of the genus⁽⁹⁾ it could be distinguished from *O. bimaculata* and the variety of *O. elliptica* by the median vitta of the pronotum.

***Oomela trifasciata*, n. sp.**

Fig. 5, D.

Red or flavous-red, with black markings.

Head with scattered punctures, and a shallow interocular depression. Antennae rather long and thin, no joint transverse. Prothorax about four times as wide as long; with minute punctures and a few of larger size, but still small,

⁽⁹⁾ Lea, *l.c.*, p. 579.

on sides. Elytra very little wider than prothorax at base, sides gently rounded; with regular rows of small punctures, the interstices scarcely visibly punctate. Length, 4 mm.

Queensland: National Park, in November (H. Hacker). Type, in Queensland Museum.

On this and the two following species the claws, from most directions, appear to be simple, and they are drawn backwards so that it is difficult to examine them clearly, but from some directions they are seen to have a fairly large appendix, with a slight notch between the appendix and the rest of the claw; this is more clearly seen on the front tarsi than on the others. Their markings are strikingly at variance from those of all the previously named species of the genus, and it may eventually be considered desirable to propose a new genus for their reception. The elytral epipleurae are more concave than on other species of the genus. The head is black between the eyes, the pronotum is black, except for a median vitta not extending to the base, the sides are usually narrowly reddish, the elytra have three jagged fasciae: one at the basal third (touching the suture to the base), one postmedian (touching the suture from the middle to the apical third), and one subapical (touching the suture to the apex); parts of the under surface and the middle of the femora are black. The sexes differ slightly in the abdomen, the male only having a slight apical depression.

***Oomela hieroglyphica*, n. sp.**

Fig. 5, E.

Head and scutellum reddish, prothorax black, parts of base obscurely reddish, elytra flavous with dark metallic-blue markings, the suture reddish; under surface black, in parts reddish, legs reddish, middle of femora and upper edge of tibiae blackish.

Head with minute punctures; clypeal suture rather deep, its middle dilated into a fairly large fovea. Antennae moderately long, somewhat dilated to apex. Prothorax almost four times as wide as long; with small but sharply defined punctures sparsely scattered about, and very minute ones. Elytra no wider than prothorax at base, but sides gently rounded, and widest at basal third; with regular rows of rather small punctures, the interstices almost impunctate. Length, 4.5 mm.

Queensland: National Park, in November (H. Hacker). Types, in Queensland Museum.

Differs from the preceding species in having the pronotum without a pale median vitta; the zigzag fasciae of the elytra of different shape, the second connected with the first (on one specimen of that species the second is almost connected with the first, but in a different way). The dark markings are very irregular, at the basal third on each elytron of the male there is a mark which at first is directed outwards, and then curves round to touch the base in the middle; just beyond the middle is a very irregular fascia, which is twice dilated and touches the side, from the first dilated part a branch extends obliquely forwards to end on the shoulder; on the inner side joined to the curved subbasal mark and outwardly joined to the margin, near the apex, there is another fascia touching both suture and side. On the female the subbasal and the front part of the postmedian markings are as on the type, but the outer portion of the postmedian marking appears more as an appendage, than part of the fascia itself (with which it is narrowly connected), and the subapical marking is also narrowly connected with the postmedian one. The antennae are dilated to apex but compressed, from positions where the full width is visible it may be seen that the eighth-tenth joints are fully as wide as long, or slightly transverse. The elytral epipleurae are

flavous and rather wide, flattened, but narrowed and wrinkled posteriorly. The male has a smaller and less convex abdomen than the female, with its tip slightly notched.

***Oomela picta*, n. sp.**

Fig. 5, F.

Reddish, flavous, coppery, and dark metallic blue, or green, the elytra trifasciate.

Head with minute punctures; clypeal suture deep and expanded in middle. Antennae moderately long, somewhat dilated to apex, eighth joint about as long as wide, ninth and tenth moderately transverse. Prothorax about four times as wide as long; with small, scattered punctures, and some larger ones on parts of the base. Elytra at base the width of base of prothorax, sides rounded and nowhere parallel; with regular rows of rather small punctures, the interstices impunctate; epipleurae slightly convex, wrinkled posteriorly. Length, 5 mm.

Queensland: Brookfield (H. Hacker). Type (unique), in Queensland Museum.

Differs from the preceding species in the metallic head and prothorax, and large isolated basal spot on each elytron, the fasciae are also all disconnected, except with the suture. The head and prothorax are coppery, with the muzzle red; the elytra are flavous, with a large basal spot on each side, and three wide, irregular fasciae, metallic blue, narrowly edged, in some lights, with brilliant golden-purple, the punctures also, in some lights, are brilliantly metallic; the first fascia terminates at the margin, the second is continued over it to the epipleura, and the third does not touch the margin. It is probable, however, that the markings are variable. The metasternum and part of the abdomen are coppery-green, the rest of the under surface and the legs are reddish, the antennae are black, with the basal joint reddish, and the tip of the eleventh joint obscurely reddish. The sex of the type is doubtful, the abdomen is less convex than is usual on the female, but its tip is simple.

***Oomela pictipennis*, n. sp.**

Flavous with a slight metallic gloss, some parts slightly infuscated or reddish, the elytra with two irregular dark fasciae and two subapical spots; six or seven apical joints of antennae blackish, the rest pale.

Head almost impunctate, clypeal suture deep and dilated in middle, a feeble median line connecting it with base. Antennae moderately long, somewhat dilated to apex, eighth-tenth joints almost as wide as long. Prothorax about four times as wide as long, with rather sparse and small, sharply defined punctures, a few larger ones at extreme base. Elytra with sides subparallel for a short distance, with regular rows of rather small punctures, the interstices impunctate. Length, 4.5 mm.

Queensland: Kuranda, in October (F. P. Dodd). Type (unique), I. 17119.

A beautiful species. The appendix to each claw is larger and more distinct than on the three preceding species, but from some directions, even on this species, the claws appear simple. The middle of the pronotum and the metasternum are darker than the adjacent parts, but they are not deeply infuscated. On the elytra the suture and a basal spot on each side are slightly reddish; there are two irregular brownish fasciae, the first at the basal third, touching the sides (along which it is continued half-way to the base) but not the suture; the second is strongly curved (with the convex side in front) and touches neither the suture nor side, but is connected on the middle of each elytron with the first fascia, and there is a round spot on each side near the apex. As on so many pale species of the subfamily the elytral punctures, from some directions, appear to be much larger than they really are, owing to "waterlogging"; from oblique directions,

however, their true sizes are evident. As the tip of its abdomen is slightly notched the type is evidently a male.

***Geomela tropica*, n. sp.**

Black, elytra with a slight coppery gloss, under surface, legs, antennae, and palpi reddish, femora partly infuscated.

Head with fairly large punctures; clypeal suture curved and dilated on each side. Antennae long and thin, none of the joints transverse, eleventh one-half longer than tenth. Prothorax not quite four times as wide as long, sides evenly rounded; with numerous, but not crowded, punctures of moderate size, becoming somewhat larger and denser on sides, and with rather dense minute ones. Elytra elongate-cordate, base scarcely wider than base of prothorax, sides gently rounded; with regular rows of moderately large punctures, the interstices with minute punctures as on pronotum. Legs moderately long. Length, 5 mm.

North Australia: Adelaide River (H. W. Brown). Type, I. 17103.

An elliptic species about the size of *G. nobilis*, and with similar outlines, but antennae and legs red, and upper surface not at all bluish. The punctures beyond the hind coxae are larger than elsewhere.

***Chalcolampra longicornis*, n. sp.**

Black with a slight bronzy gloss, antennae (the apical half more or less deeply infuscated), palpi and legs castaneo-flavous.

Head with rather dense but somewhat irregular punctures of moderate size, a small fovea near each antenna. Antennae long and thin, no joint transverse. Prothorax about thrice as wide as long; with rather dense and coarse punctures on sides, and a few in middle, and with numerous minute ones. Elytra at base scarcely wider than base of prothorax, sides gently rounded; with regular rows of fairly large punctures, becoming smaller posteriorly; interstices with fairly dense and minute punctures. Claws moderately dilated and subangulate near base. Length, 5 mm.

Western Australia: Perth. Type (unique), I. 4863.

A briefly elliptic, submetallic species, with outlines much as on *C. podagrosa* (from New South Wales) but with longer and thinner antennae, larger and more numerous punctures on pronotum and more numerous and sharply defined ones, although small, on the elytral interstices.

***Chalcolampra cribricollis*, n. sp.**

Dark blackish-blue and finely shagreened, under surface black, antennae and palpi obscurely reddish, legs obscurely diluted with red.

Head with numerous sharply defined punctures of moderate size near eyes, smaller elsewhere; clypeal suture triangular and nonfoveate. Antennae moderately long and not very thin. Prothorax about thrice as wide as long, sides evenly rounded; with crowded punctures of moderate size, not much sparser in middle than on sides, and with minute punctures scattered about. Elytra very little wider than prothorax at base; with regular rows of fairly large punctures, the interstices gently convex and with minute punctures. Apical segment of abdomen subtriangularly depressed in middle. Length, 6 mm.

Tasmania: Mount Wellington (Rev. T. Blackburn). Type (unique), I. 3372.

A dull, dark blue species, with unusually numerous punctures on pronotum. From some directions the claws appear simple, but each has a fairly large basal swelling. The type, judging by the abdomen, appears to be a male.

CHALCOLAMPRA HURSTI Blackb.

Six specimens, from Kangaroo and Flinders Islands (South Australia), appear to belong to this species, but differ from some cotypes (from Queensland) in being slightly more parallel-sided, and with somewhat smaller punctures.

CHALCOLAMPRA GYRATA Lea.

A specimen, from Kangaroo Island, differs from the type in being slightly larger, and with the larger punctures on the pronotum slightly sparser and smaller.

Eugastromela, n. gen.

Head small and normally vertical; clypeal suture deep. Eyes lateral, rather small, transverse, with coarse facets. Antennae long, thin, and subfiliform, first joint stout, seventh-eleventh slightly dilated but all longer than wide. Apical joint of maxillary palpi rather long, its tip oblique. Prothorax transverse, apex incurved to middle, sides finely margined. Scutellum small. Elytra not much wider than prothorax, with series of feeble tubercles, and irregular rows of punctures; epipleurae wide. Prosternum with a wide intercoxal process, its sides finely margined, and hind end notched or obtusely bilobed. Metasternum moderately long, middle not simple on male; episterna narrow. Abdomen with first and fifth segments large. Legs moderately long, front coxae transverse; tibiae notched at outer apex for reception of base of tarsi, basal joint of tarsi dilated in male, claws simple. Glabrous, except for antennae and tarsi.

In my table of the genera of Chrysomelides⁽¹⁰⁾ the genus could be associated with *Strumatophyma*, and that is perhaps its nearest ally, but the species of that genus are considerably larger, with the derm rough, and the clypeal suture and palpi different. In the allied genus, *Chalcolampa*, the basal joint of the tarsi (especially the front ones) is often greatly enlarged, and the claws, although not simple, are often rather feebly dentate. I have not broken a specimen, to be sure, but believe all the species to be apterous. I was inclined to consider, from examination of the upper surface only, the six specimens under examination, as belonging to but one species, but, after floating them off, it was evident that there were considerable differences in the metasternum and abdomen, and that the males are abundantly distinct by those parts. They are all deep black, with pale antennae and tarsi, except that on *E. spiniventra* those parts are infuscated. Type of genus, *E. metasternalis*.

Eugastromela metasternalis, n. sp.

♂. Black and shining, antennae, palpi and tarsi flavous, but parts of antennae somewhat infuscated.

Head impunctate; clypeal suture deep, its ends foveate; a narrow impression near each eye, ending in a fovea. Antennae thin, third joint longer than second, eleventh about once and one-half the length of tenth. Prothorax about once and one-half as wide as long, impunctate. Elytra about one-third longer than wide, sides nowhere parallel; with irregular rows of rather large punctures, becoming still more irregular about apex, interstices scarcely visibly punctate, the fourth and sixth with several obtuse tubercles, some of the others with very feeble inequalities. Intercoxal process of prosternum about twice as long as its greatest width (near the front), its posterior end obtusely notched. Metasternum with an obtuse ridge on each side of middle, the two almost meeting at the apex. Basal segment of abdomen about as long as the apical, and each almost as long as the three intermediate ones combined, each of the latter with a row of coarse punctures in middle, giving the surface a subgranulate appearance. Basal joint of front tarsi slightly wider than long. Length, 4 mm.

(10) Lea, l.c., p. 397.

♀. Differs in having the metasternum flat in middle, basal and apical segments of abdomen somewhat smaller (the punctures on the second to fourth are, however, quite as on the type), the tibiae thinner, and the basal joint of tarsi smaller.

Victoria: Melbourne and North Gippsland (H. W. Davey), Emerald (A. H. Elston from C. Jarvis). Type, I. 17125.

On the metasternum of the male the two ridges, as viewed from behind, look like two subapproximate granules; the tip of its abdomen is obliquely flattened, on the female it is evenly convex. The front tibiae of the male, from directly above, is seen to be dilated to apex, and notched there, from the sides its apical third appears narrowed and gently incurved. The specimen from Gippsland has slightly larger but more obtuse tubercles on the elytra than on the type, and the basal joint of each tarsus is slightly larger. On the female there are about ten tubercles on each elytron, and they are more conspicuous than on either of the males.

***Eugastromela spiniventra*, n. sp.**

♂. Black, shining; antennae tarsi and palpi obscurely dilated with red.

Head impunctate; clypeal suture with a small fovea on each side, behind each of which is a small impression. Antennae and prothorax as in preceding species, except that the apical joint of the antennae is somewhat smaller. Elytra subopaque, about once and one-half as long as wide, sides nowhere parallel, with irregular rows of moderately large punctures, the interstices with numerous obtuse tubercles (about thirty on each elytron). Intercoxal process of prosternum with narrow margins, terminated one-third from the front, posteriorly with distinct punctures. Metasternum with two small granules near apex. Basal segment of abdomen opaque, about as long as the three following ones combined, but shorter than apical one, base with a conspicuous median spine, apical segment with median space obliquely flattened, and ending in a large shallow impression. Length, 5 mm.

Tasmania: Waratah (A. M. Lea). Type, I. 17126.

With much more numerous tubercles on the elytra than on the preceding species, and very distinct by the abdominal spine; the small elevations on the metasternum rise suddenly, instead of being the ends of oblique ridges. The intercoxal process of the prosternum differs considerably in its front portion from that of that species, being narrower and without lateral ridges, the tibiae are more dilated to apex and the basal joint of each tarsus is still larger, and longer than wide. The base of the under surface of the head is exposed, and is seen to be transversely strigose for a stridulating apparatus. On the preceding and following species there is no trace of this.

***Eugastromela flavitarsis*, n. sp.**

♀. Black, shining, the elytra subopaque, antennae, palpi and tarsi flavous, trochanters reddish.

Head impunctate; clypeal suture feeble in middle, but foveate on each side, each fovea with an oblique impression connecting it with the side of an eye. Antennae and prothorax as on *E. metasternalis*. Elytra with irregular rows of fairly large punctures, each with about ten very obtuse tubercles. Intercoxal process of prosternum wide and widest at apex, with narrow margins throughout. Apical segment of abdomen slightly shorter than the three preceding combined, and slightly shorter than basal. Length, 4 mm.

Victoria: Beaconsfield, in April (F. E. Wilson); Ararat (H. J. Carter from T. G. Sloane). Type, I. 17127.

Differs from the female of *E. metasternalis* in the abdominal punctures being much smaller, those on the fourth segment are larger than on the other

segments, but they also are quite small, and do not give the surface a granulated appearance, the tibiae are thinner and the claw joint is longer; the elytra also are less shining than on that species. The specimen from Ararat has the elytral tubercles so obtuse that they might fairly be regarded as absent.

PSYLLIODES LUBRICATA Blackb.

This species occurs in abundance on *Solanum nigrum*, and occasionally on other solanaceous plants, in many parts of Eastern Australia, from Mount Tambourine in Queensland, to the Dividing Range, in Victoria. It was described originally from a form with brassy-green elytra and golden pronotum, and such a form is fairly common, but the commonest of all is one having the prothorax and elytra of an almost uniform shade of brassy-green. Many specimens, however, are bluish-green, or blue, or purple, sometimes blue, with the elytra purple; the extent of infuscation of the legs also varies, the hind femora are seldom entirely pale, and are often almost entirely black; the three basal joints of the antennae are pale, and sometimes some of the others, and the joints near the third are never more than slightly infuscated.

Var. **howensis**, n. var. Twenty-two specimens, from Lord Howe Island, have the prothoracic punctures rather denser than on mainland forms, the legs pale, except that the hind femora are black, with a brassy or brassy-green gloss, at least half of the antennae pale, and the following joints but slightly infuscated. The upper surface is usually brassy.

Var. **norfolcensis**, n. var. Numerous specimens, from Norfolk Island, differ from the mainland forms in having the prothoracic punctures smaller and sparser, even on the sides, the three basal joints of antennae flavous, and the others black; the legs are usually castaneous, with the hind femora deeply infuscated or black, but occasionally they are entirely castaneous; the upper surface is nearly always brassy-green. This form may be at once distinguished from the others by the sharply contrasted colours of the third and fourth joints of antennae, in all the other forms the change from a pale to a dark joint being more or less gradual.

Two specimens from Lord Howe Island, in the Australian Museum, have the prothoracic punctures and antennae as on the variety *norfolcensis*, one has the upper surface purple, the other has it black, with a slight bronzy gloss.

Aproidea cribrata, n. sp.

Dull flavous; sides of head, of prothorax, and parts of elytra with irregular patches or spots of purplish-brown; prosternum, mesosternum, coxae, trochanters, tarsi, and parts of antennae reddish-brown; ninth and tenth joints of antennae deeply infuscated, eleventh joint flavous.

Head subquadrate, with crowded punctures. Antennae slightly passing scutellum, first joint stout, second small, scarcely half the length of third, the latter about one-fourth longer than fourth, the others gradually decreasing in length, but eleventh longer than tenth. Prothorax slightly transverse, sides gently undulated, angles acute, with an obtuse ridge on each side of middle, and another on each side margin; with crowded punctures much as on head. Scutellum with rather dense punctures; elytra wider than prothorax, sides dilated to beyond middle, and then narrowed to apex, where each is produced in a stout spine; base sinuous; each with an obtuse ridge on the outer side of the fourth row of punctures; with rows of very large punctures or small foveae. Under surface with crowded punctures on prosternum and on sides of head, elsewhere with small and sparse ones. Legs short, femora edentate. Length, 5.5 mm.

Queensland: National Park (H. Hacker). Type (unique), in Queensland Museum.

A much smaller and decidedly rougher species than *A. balyi*, with a shorter head, paler antennae, only one terminal joint pale, femora unarmed, etc. Probably in life the parts are greenish that are now flavous; on each elytron the dark parts are: a spot about scutellum, an antemedian spot nearer the side than suture, and a postmedian vitta extending to the apex of the apical spine; there are also several less defined spots.

MONOLEPTA FROGGATTI Blackb., ♀, 1891.

M. pictifrons Blackb., ♂, 1896.

This species was described originally as from Ballarat. A female in the South Australian Museum is marked as a cotype, and agrees with the description, except that the scutellum is black, and that the sides of the elytra are infuscated (no doubt overlooked). Mr. F. Erasmus Wilson and I recently obtained, on the Upper Williams River, in New South Wales, numerous specimens that probably belong to the species; the females agree well with the cotype, except that the dark parts of the elytra are more intensely black, and the sutural marking less extended; they vary, however, in the abdomen; many of them have this entirely dark (as on the cotype), and others have it entirely pale; still others have two dark spots on each of the intermediate segments. The male (Mr. Wilson obtained a pair, still fast *in cop.*) differs in being smaller and with the elytra entirely deep black; on some specimens, in certain lights, however, they appear to be darker about the suture than elsewhere. Similar specimens were previously commented upon as probably belonging to *M. pictifrons*.⁽¹¹⁾ Two cotypes of *pictifrons* in the Museum are males, and have the elytra blackish, with the sutural region intensely black; they were from "Victoria," and, I am now convinced, are males of *M. froggatti*. I know of no other species in the genus in which the sexes differ so much.

EROTYLIDAE.

Isolanguria, n. gen.

Head obtusely subtriangular, a swelling behind each eye; clypeal sutures indistinct except at sides, not conspicuously distinct from labrum. Eyes small, lateral, moderately faceted. Antennae short, club three-jointed. Palpi small. Prothorax elongate, sides and base narrowly margined. Scutellum small and strongly transverse. Elytra long, thin, and almost parallel-sided. Prosternum with intercoxal process rather narrow, its apex truncate, and a fine ridge on each side; coxal cavities open. Metasternum elongate, episterna thin, epimera minute. Abdomen with first segment about one-fourth longer than second, the others gradually decreasing in length, coxal lines not distinct. Legs short, femora stout, tibiae with a short apical spine, tarsi with three basal joints densely clothed on lower surface, fourth joint scarcely visible, claw joint long and thin.

The type of the genus is a thin, flat, brown species, which evidently belongs to the Languriides. The tarsi are densely clothed, and have rather short setae at the sides, so that Fowler would probably have referred the genus to his first main division of the subfamily,⁽¹²⁾ placed there as the coxal lines are not in evidence; and as the head is symmetrical in both sexes (the swelling behind each eye seems to be a very unusual feature in the subfamily), femora unarmed, club of antennae longer than broad, elytra rounded at apex, and eyes not coarsely faceted, it could be associated with *Perilanguria* (the description of this genus is very unsatisfactory, but the characters noted in the table appear to be useful, *P. monticola* is noted as the type of the genus, and was described as having the club four-jointed, etc.). Regarding it as belonging to his second division it cannot be traced

(11) Lea, Proc. Linn. Soc. N.S. Wales, 1923, p. 525.

(12) Fowler, in Wytzman's Genera Insectorum, Fasc., 78.

beyond the genera 34-36, from *Penolanguria* it is distinguished by its elongate form, and from *Ischnolanguria* and *Languria* (in the table *Languria* is noted as having the club five or six jointed), by its three-jointed club, it does not appear, however, to be very close to any of the genera figured by Fowler. The front coxal cavities appear to be closed behind by a thin flap, but from some directions a fine projection from each coxa may be seen extending alongside the intercoxal process to the apex, where it slightly overlaps the flap; on dissection this is easily ruptured, when the cavity appears to be widely open.

***Isolanguria fusca*, n. sp.**

Dark castaneous, elytra abdomen and basal joints of antennae somewhat paler, legs castaneo-flavous. Upper surface glabrous, under surface finely pubescent, a short fringe at apex of prosternum and a thin fascicle on each side of apex of abdomen.

Head gently convex; with rather dense and sharply defined but not very large punctures. Antennae not extending to front coxae, first joint stout, third distinctly longer than second or fourth, fourth to eighth small and subglobular, ninth longer and about twice as wide as eighth, the size of tenth and smaller than eleventh. Prothorax longer than wide, sides dilated at apex, obliquely narrowed to near base, base somewhat sinuous, a shallow fovea on each side of it, and a smaller one on each side at basal third; punctures much as on head, but with an impunctate median line. Elytra not as wide as widest part of prothorax, with rows of fairly large punctures, becoming small posteriorly, interstices with sparse punctures. Prosternum with rather large punctures on flanks, smaller and more or less transversely confluent elsewhere. Metasternum with punctures as on head. Abdomen with somewhat smaller and denser punctures, apical segment slightly concave, its tip obtusely produced. Hind femora scarcely extending to middle of second abdominal segment. Length, 7 mm.

Lord Howe Island (A. M. Lea). Type, I. 11780.

Three specimens were beaten from recently felled shrubs; one (probably a male) has the prothorax more dilated in front than the others.

COCCINELLIDAE.

***Rhizobius erythrogaster*, n. sp.**

Black, muzzle, antennae, palpi, abdomen, and parts of legs more or less reddish. Moderately densely clothed with rather long and waved, whitish pubescence, mixed with rather long, erect, dark setae; under surface and legs more sparsely clothed.

Head with fairly dense but inconspicuous punctures. Prothorax with rather dense punctures, more distinct on sides than in middle; front angles produced and rounded off. Elytra with dense and, except where obscured by pubescence, sharply defined punctures. Abdomen with fairly dense punctures, tips of lamellae almost touching apex of first segment. Prosternum with a fine carina on each side of the median process. Length, 2.2-3.0 mm.

Norfolk Island (A. M. Lea). Type, I. 11661.

A rather strongly convex species, with the red abdomen of *R. ventralis*, and in general resembling that species, but consistently much smaller, pubescence longer and more waved, and mixed with moderately long, erect, dark setae (much more numerous and distinct than on that species). In Blackburn's table of *Rhizobius*⁽¹³⁾ it could be associated with that species. Some specimens have a

(13) Blackb., Trans. Roy. Soc. S. Austr., 1892, pp. 257-9.

slight metallic gloss, but on most of them the upper surface is a deep shining black; the metasternum is usually deep black, in strong contrast with the abdomen, but is occasionally of a dingy reddish brown, the trochanters and tarsi are always pale, the tibiae are usually paler than the femora, the head is more or less obscurely diluted with red from the middle to the front, sometimes almost to the base, the front of the prothorax is sometimes very narrowly reddish. Twenty-nine specimens were obtained.

***Rhizobius viridipennis*, n. sp.**

Head, prothorax, antennae, palpi, legs, and part of abdomen more or less dingy red, elytra dark metallic green, mesosternum, metasternum, and basal parts of abdomen black or infuscated. Moderately densely clothed with whitish or slightly golden pubescence, interspersed with numerous suberect, but not very long, dark setae.

Head with fairly dense and sharply defined punctures at base, becoming smaller in front. Prothorax more than thrice as wide as long, sides strongly rounded in front; with rather dense punctures, becoming crowded on sides. Elytra with dense, even, sharply defined punctures. Abdomen with lamellae terminated about one-fourth from apex of basal segment. Prosternum with a fine carina on each side of the median space. Length, 2.5-3.0 mm.

Lord Howe Island (A. M. Lea). Type, I. 11664.

In general appearance close to some specimens of *R. hirtellus*, but the average size smaller, sides of prothorax more rounded in front, upright setae less numerous and much shorter, and elytral punctures larger and more sharply defined. The elytra are decidedly green on most of the specimens, but on a few are more or less bronzy or obscurely purple; the red of the head and prothorax is usually uniform, although never bright, but on some specimens the disc of the latter is obscurely infuscated, and on two of them the infuscation extends almost to the sides; the extent of infuscation of the basal part of the abdomen varies; on some specimens the femora are also infuscated. Thirteen specimens were obtained, including two from tree-ferns on Mount Ledgbird.

***Rhizobius filicis*, n. sp.**

Black, muzzle, antennae, palpi, tip of abdomen and parts of legs more or less reddish. Moderately densely and uniformly clothed with whitish pubescence.

Head and prothorax with punctures as on preceding species; elytra with rather denser ones, becoming very small near suture. Lamellae of abdomen extending to about one-fourth from tip of basal segment. Length, 2.5-2.7 mm.

Lord Howe Island (A. M. Lea). Type, I. 11665.

The general outlines are much as on the preceding species, but the colours and clothing are very different, the punctures near the suture are much smaller, and the median space of the prosternum is more triangular, with less conspicuous carinae. In Blackburn's table the species would probably be associated with *R. lindi* and *R. dorsalis*, to both of which it has a general resemblance; from the former it differs in being not at all metallic, elytra with somewhat larger punctures and without a fringe of longer hairs (on most specimens of *lindi* the longer hairs or setae, of the upper surface, appear to form a quite conspicuous lateral fringe); from *dorsalis* it differs also in the elytral punctures and clothing. The tarsi and palpi are almost flavous, the tibiae and trochanters are usually paler than the femora. Most of the specimens have entirely black elytra, but on several the elytra, except for the sides and suture, are of a dingy reddish-brown; on such specimens the dull red portion of the abdomen extends along the sides almost to the base. Twenty-three specimens were beaten from ferns on the summit of Mount Gower.

Scymnus rostratus, n. sp.

Dark castaneous-brown, prothorax, sides excepted, almost black, tarsi almost flavous. Upper surface with numerous, but not dense, suberect, reddish setae.

Head subtriangular, with fairly distinct punctures. Prothorax more than thrice as wide as long, with small punctures. Elytra evenly and rather strongly convex; with dense, sharply defined punctures. Under surface with punctures as on elytra, but less dense. Length, 0.9-1.0 mm.

Lord Howe Island (A. M. Lea). Type, I. 11662.

From the sides the muzzle seems to be produced as on some species of Pythidae, and under a compound power the eyes seem rather coarsely faceted, and the suture between the two first abdominal segments to be distinct, so it is possible the species should not have been referred to *Scymnus*, but to a new genus. I was not able to manipulate the hind legs so as to expose the abdominal lamellae. Three specimens were obtained, and the average of these is slightly smaller than the average of *S. vagans*, but the two species are very different in their clothing, punctures, muzzle, etc. One of the specimens is much darker than the others.

Scymnus macrops, n. sp.

Castaneous-brown, some parts darker, antennae, palpi, tibiae, tarsi and elytral epipleurae more or less flavous. Clothed with short, whitish pubescence, somewhat longer and less depressed on upper surface than on under.

Head smooth, with fairly dense and rather small but distinct punctures. Eyes larger than usual. Prothorax about four times as wide as long, sides rather strongly rounded, punctures slightly denser than on head, but less distinct. Elytra with punctures as on head. Abdomen with sutures obliterated in middle, lamellae touching tip of basal segment for most of their width. Length, 2.0-2.2 mm.

Lord Howe Island (A. M. Lea). Type, I. 11666.

The size and outlines are much as those of *S. aurugineus*, but the elytra, except that the suture and base are very narrowly darker, are uniformly coloured throughout, and have somewhat longer pubescence; it is rather larger and more oblong than *S. australis*, less brightly coloured, clothing longer and eyes larger; from *S. inaeffectatus*, to which perhaps it is closest, it differs in being slightly more oblong and the eyes somewhat larger and closer together. The under surface, except the sides of the prosternum and sometimes the tip of the abdomen, and scutellum are black or piceous-brown, and the femora are deeply infuscated. Five specimens were obtained, and of these three have the head slightly paler than the prothorax, and two have it slightly darker; the difference is probably sexual.

Scymnus obscuripennis, n. sp.

Black or piceous-brown, elytra obscurely paler; muzzle, antennae, palpi, and legs flavous. Rather densely clothed with subdepressed, ashen or whitish pubescence.

Elliptic-ovate, rather strongly convex, punctures of elytra fairly dense and distinct, elsewhere sparser and less distinct. Abdomen with suture between two basal segments feeble in middle, lamellae extending to about one-third from apex of basal segment. Length, 1.2-1.5 mm.

Norfolk Island (A. M. Lea). Type, I. 11761.

About the size of *S. vagans*, but with longer clothing, elytra paler, and legs entirely flavous. On specimens with the prothorax black the elytra are of a dingy reddish-brown, those with the prothorax piceous-brown have the elytra somewhat

paler, but they are never of a bright red, the flavous portion of the head varies in extent, probably sexually. Eleven specimens were obtained.

***Scymnus variiceps*, n. sp.**

♂. Black or blackish, head, front angles of prothorax, antennae, palpi, and tarsi more or less reddish. Densely clothed with short, depressed, uniform, ashen pubescence.

Head rather wide, with small, dense punctures. Prothorax more than thrice as wide as long, punctures much as on head. Elytra with very dense punctures, slightly more distinct than on head. Abdomen with six segments, lamellae large, and touching apex of first segment for most of their width. Length, 2.5-3.5 mm.

♀. Differs in having the head dark, except for the flavous muzzle, and the prothorax without a pale spot in each front angle.

Lord Howe Island (A. M. Lea). Type, I. 11762.

A depressed species, with antennae somewhat longer than the space between the eyes, and with the suture between the two basal segments of abdomen fairly distinct in the middle, characters somewhat at variance with *Scymnus*, but as the eyes are finely faceted, elytral epipleurae not foveate, and mesosternum not longitudinally carinate, it was considered desirable to refer the species to that genus, rather than to *Bucolus*, or to a new one; its outlines are much as those of *Rhizophius aurantii*. The tibiae and trochanters are sometimes almost as pale as the tarsi, the abdomen is usually slightly paler than the metasternum, but is not strongly contrasted with it. On several specimens of each sex the extreme front margin of the prothorax is pale. Eighteen specimens were taken, mostly on the fruit of a *Pandanus*, where they were eating a white scale insect, *Aspidiotus*, sp.

SCYMNUS FLAVIFRONS Blackb., var. *norfolkensis*, n. var.

Numerous specimens taken on Norfolk Island appear to belong to *S. flavifrons*, but differ from the typical form in being slightly more oblong, and with rather more distinct punctures. The sexes differ much as do those of the typical form, except that, on the twenty-four males taken, the pale sides of the prothorax are never narrowly connected across the apex. The clytra are either entirely black, or with the tips obscurely diluted with red.